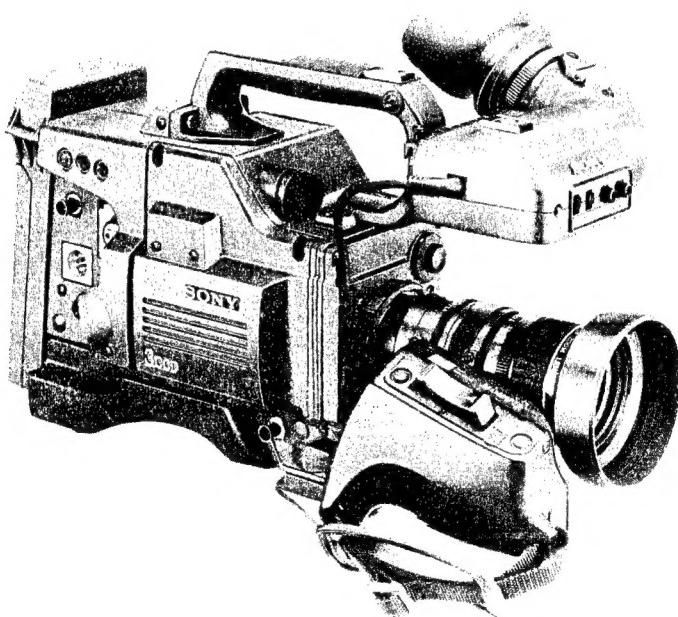


COLOR VIDEO CAMERA
CAMERA ADAPTOR
1.5INCH ELECTRONIC VIEWFINDER
ZOOM LENS

**DXC-325P
CA-325P
DXF-325CE
VCL-810BX**

**VOL. 2 Revised-1
BLOCK DIAGRAMS
SEMICONDUCTORS
SCHEMATIC DIAGRAMS
BOARD ILLUSTRATIONS
SPARE PARTS**

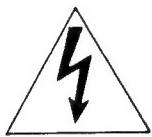
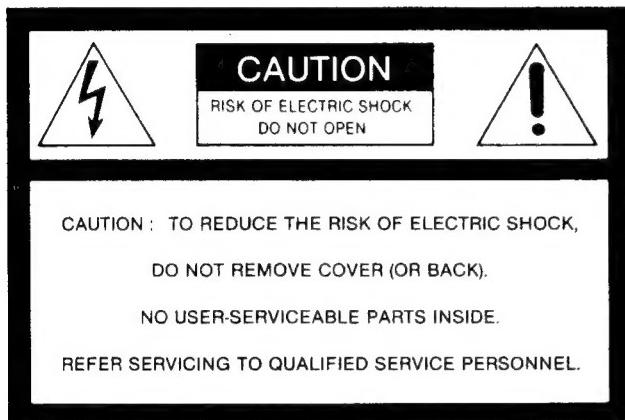


**SONY®
SERVICE MANUAL**

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Warning—This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a computing device pursuant to Subpart J of Part 15 of FCC Rules.

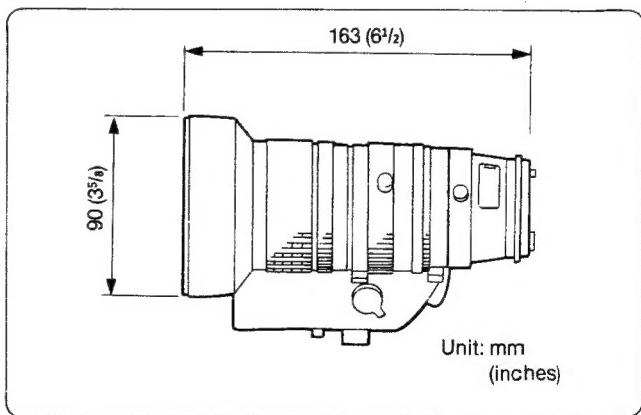
ZOOM LENS



SPECIFICATIONS

Focal length	8 to 80 mm
Zoom	Manual and motorized, selectable Zooming ratio: 10 ×
Maximum aperture ratio	1.4
Iris control	Manual and auto, selectable 1.4 to 16 and C (closed)
Range of object field (at the distance of 1.1 m)	W (wide angle): 622 × 829 (24½ × 32 ¾ inches) T (telephoto): 65 × 87 mm (2 ½ × 3 ½ inches)
Minimum object distance	1.1 m
Filter thread	62 mm dia., 0.75 pitch
Mount	Bayonet mount
Weight	Approx. 920g (2 lb) with lens hood
Supplied accessory	Operating instructions (1)

Dimensions

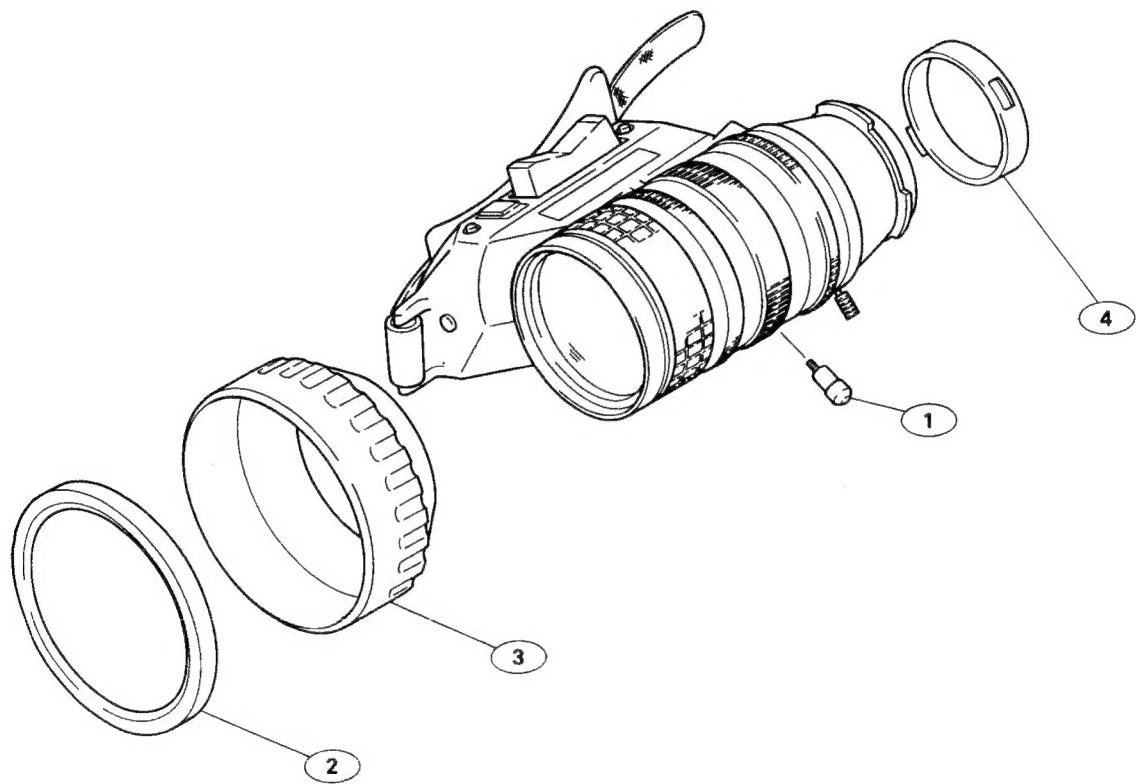


Design and specifications are subject to change without notice.

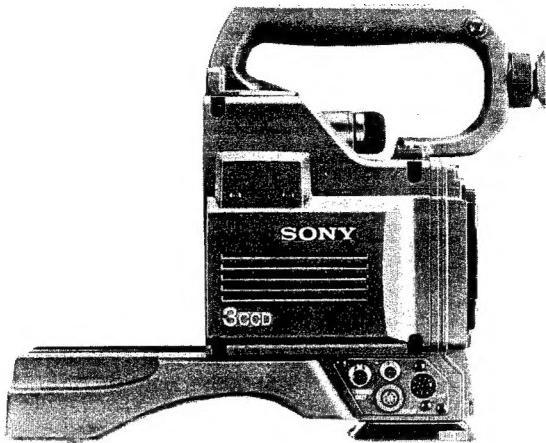
SONY®
SERVICE MANUAL

No. Parts No. SP Description

- | | | |
|---|--------------|---------------|
| 1 | 3-707-037-01 | o LEVER, ZOOM |
| 2 | 3-707-544-01 | o CAP, FOOD |
| 3 | 3-707-545-01 | o FOOD |
| 4 | 3-707-546-01 | o CAP, DUST |



COLOR VIDEO CAMERA



SPECIFICATIONS

Camera head (DXC-325/325P) and camera adaptor (CA-325/325P)		Sync system	Internal
Image device	Interline-transfer CCD, 3-chip		External with the BS or VBS signal supplied to the GEN LOCK input connector or the reference signal input to the VTR/CCU/CMA connector from the GEN LOCK connector of the CCU-M3/M3P
Picture elements	510 × 492 (h/v) (NTSC) 500 × 582 (h/v) (PAL)		
Sensing area	6.4 mm × 4.8 mm (equivalent to a 1/2-inch pickup tube)	Horizontal resolution	530 lines (center)
Built-in filters	1: 3200 K 2: 5600 K + 1/8 ND 3: 5600 K	Minimum illumination	20 lux with F1.4, + 18 dB (NTSC) 20 lux with F1.4, + 18 dB (PAL)
Lens mount	Bayonet mount	Sensitivity	2000 lux with F5.0, at 3200 K (NTSC) 2000 lux with F5.0, at 3200 K (PAL)
Signal system	EIA standards, NTSC color system (for DXC 325) CCIR standards, PAL color system (for DXC 325P)	Gain selection	0 dB, 9 dB or 18 dB, selectable
Scanning system	525 lines, 2:1 interlace, 30 frames/sec. (NTSC) 625 lines, 2:1 interlace, 25 frames/sec. (PAL)	Video output	Composite signal: 1.0 V(p-p), sync negative, 75Ω unbalanced Y/C separate signal: Y: 1.0 V(p-p), sync negative, 75Ω unbalanced C: burst level 0.286 V (NTSC) 0.3 V (PAL)
Scanning frequency	Horizontal: 15.734 kHz (NTSC) 15.625 kHz (PAL) Vertical: 59.94 Hz (NTSC) 50.00 Hz (PAL)	Signal to noise ratio	75Ω without sync 58 dB (NTSC) 56 dB (PAL)
		Registration	0.05 % for Zone I 0.05 % for Zone II 0.05 % for Zone III

SONY®
SERVICE MANUAL

Inputs/Outputs
 VTR/CCU/CMA connector: Sony Q-type,
 14-pin
 DC IN: XLR-type, 4-pin
 MIC IN: XLR-type, 3-pin
 GEN LOCK: BNC-type
 VIDEO OUT: BNC-type
 LENS: 1/2-inch lens connector (7-pin)
 2/3-inch lens connector (6-pin)
 VF: 8-pin
 EAR: mini jack
 INTERCOM: mini intercom
 TITLE: 8-pin
Power requirements
 12 V DC
Power consumption
 8 W (without viewfinder)
Operating temperature
 -5°C to +45°C (23°F to 113°F)
Storage temperature
 -20°C to +60°C (-4°F to 140°F)
Weight
 3 kg (4 lb 7 oz)
Dimensions
 See the illustrations below.
 Unit: mm (inches)

Carrying case (LC-325)

Weight Approx. 4.4 kg (9 lb 8 oz)
Dimensions Approx. 608 × 260 × 386 mm (w/h/d)
 (24 × 10 $\frac{1}{4}$ × 15 $\frac{1}{4}$ inches)

Accessories supplied

CCQ-2BRS camera cable (with Q-type 14-pin connectors)
 (supplied with the DXC-325K/325PK/325L/325PL only) (1)
 CA-325/325P camera adaptor (supplied with the
 DXC-325K/325PK/325L/325PL only) (1)
 VCL-810BX zoom lens (supplied with the DXC-325K/325PK
 only) (1)
 DXF-325/325CE electronic viewfinder (supplied with the
 DXC-325K/325PK/325L/325PL only) (1)
 LC-325 carrying case (supplied with the DXC-325K/325PK/
 325L/325PL only) (1)
 Lens cap (1)
 Chart for flange focal length adjustment (1)

Design and specifications are subject to change without notice.

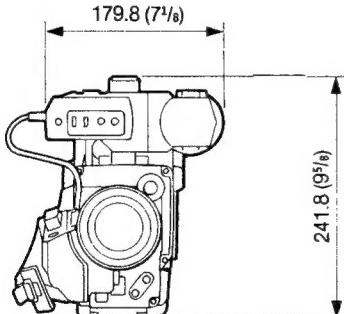
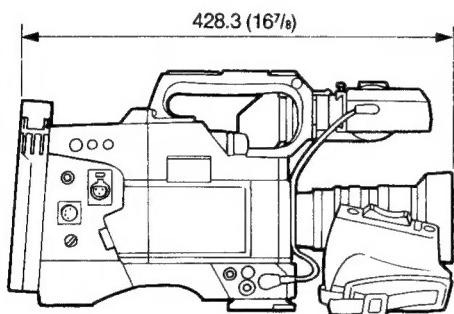


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IE-23 Block Diagram	A-9
PR-111 Block Diagram	A-11
ES-1 Block Diagram	A-13
AT-53 Block Diagram	A-15

B. SEMICONDUCTOR

Semiconductor	B-1
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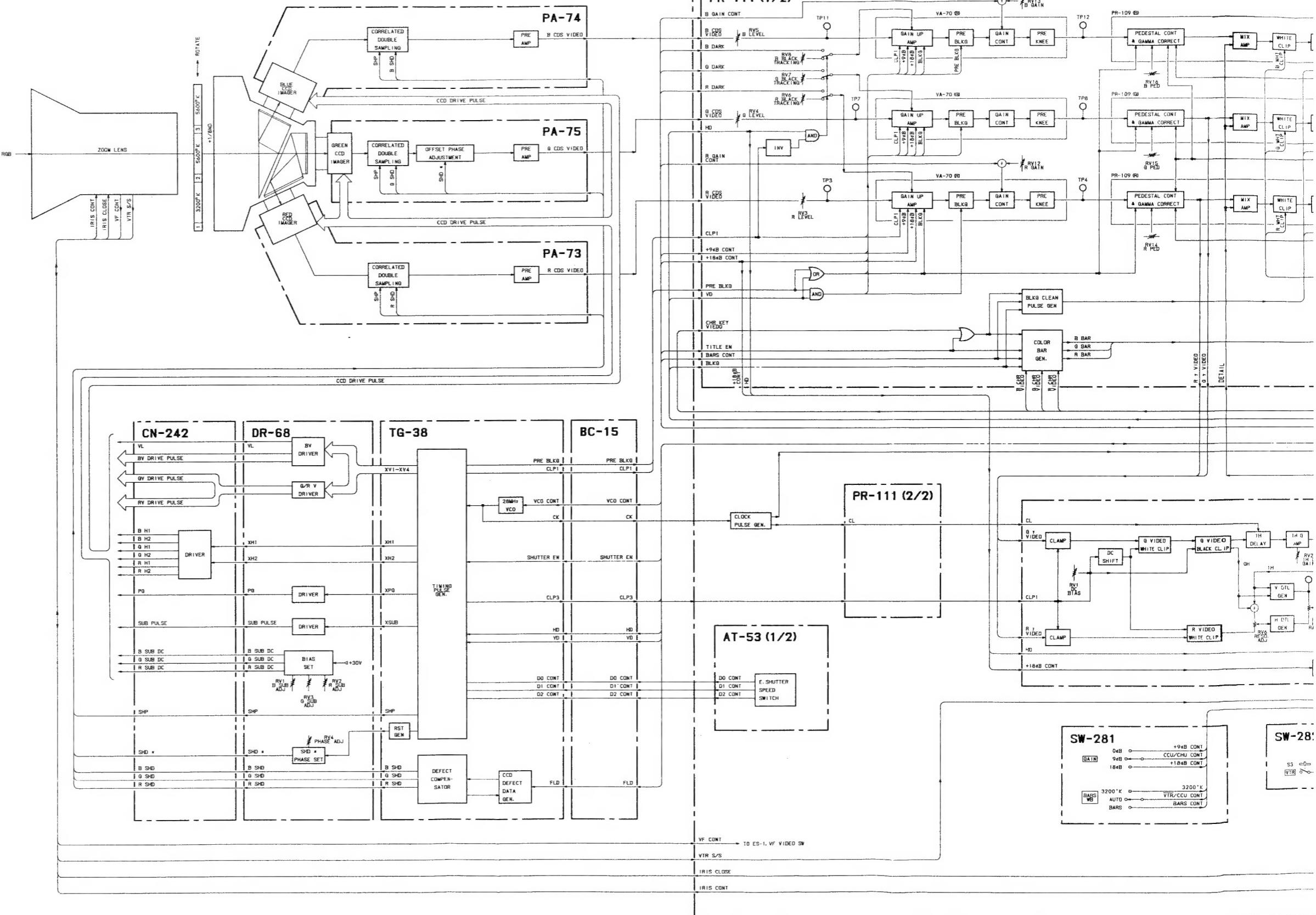
C. SCHEMATIC DIAGRAMS AND BOARD ILLUSTRATIONS

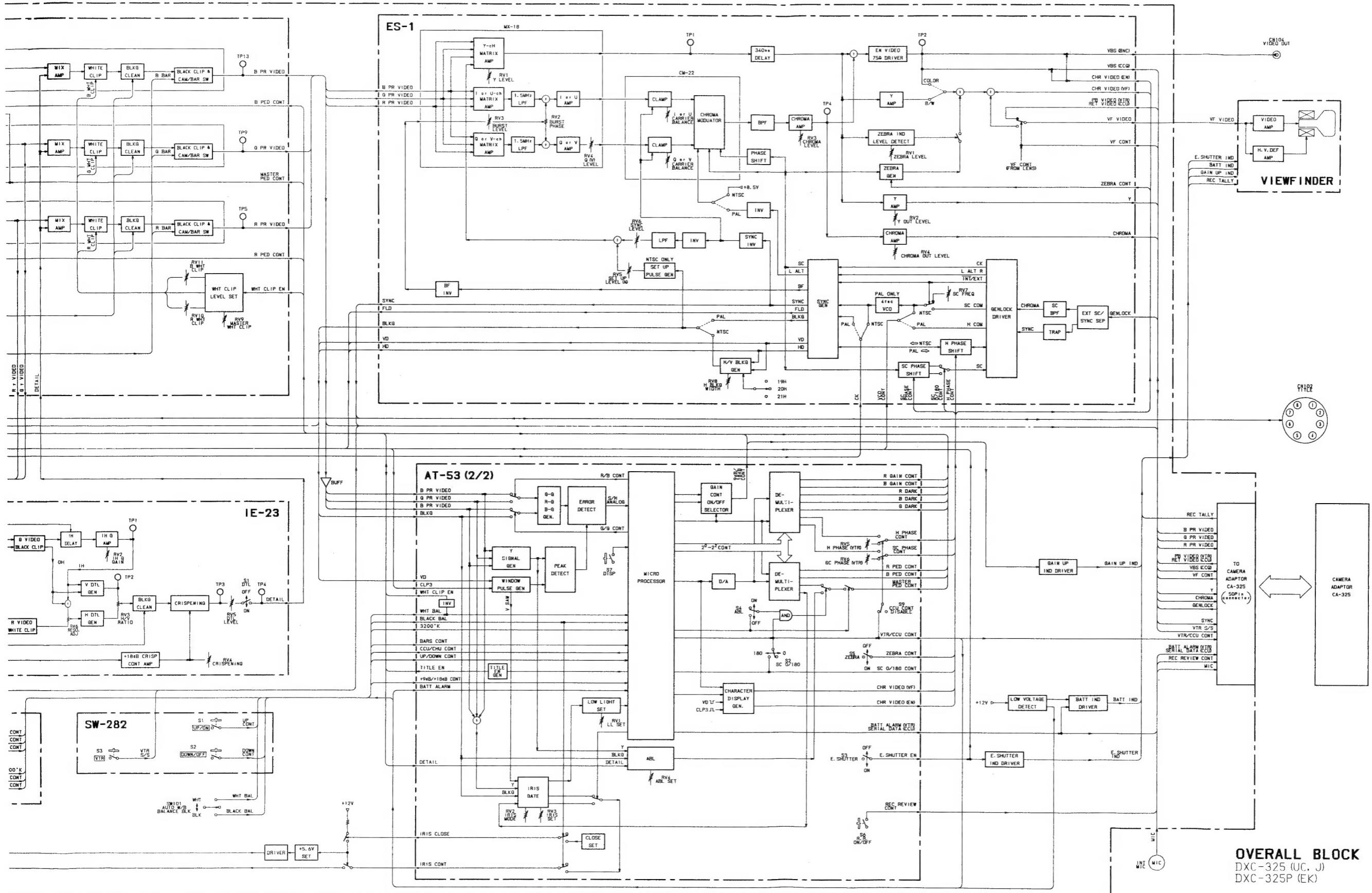
BC-15	C-3
DR-68	
TG-38	
CN-242	
PA-73	C-8
PA-74	
PA-75	
IE-23	C-15
PR-111	
PR-109	C-20
VA-70	
ES-1	
CM-22	C-28
MX-18	
AT-53	C-37
DUS-289	
Frame	C-42

D. SPARE PARTS

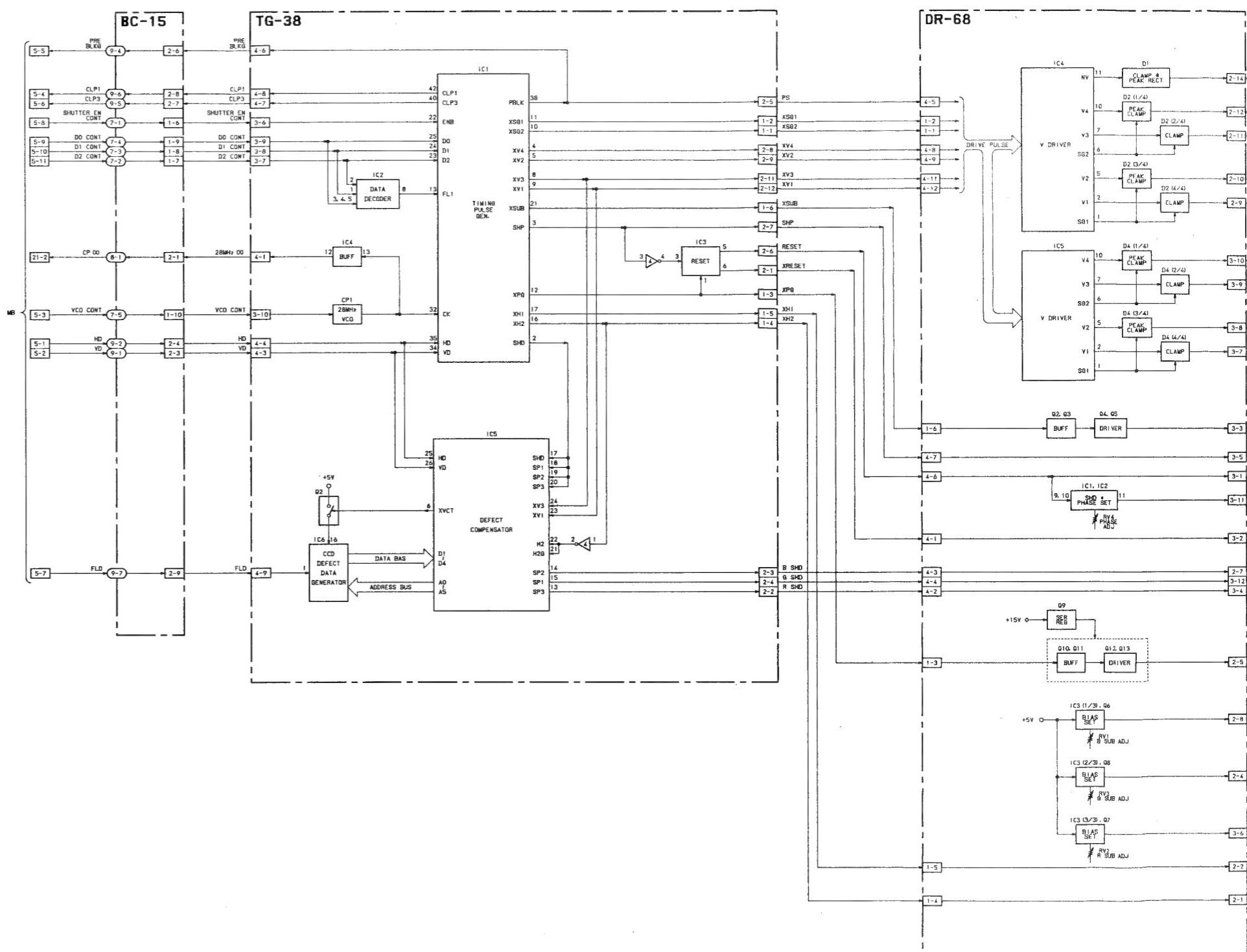
D-1. Parts Information	D-1
D-2. Screws	D-2
D-3. Exploded View	D-4
D-4. Packing Material and Accessories	D-13
D-5. Electrical Parts	D-15

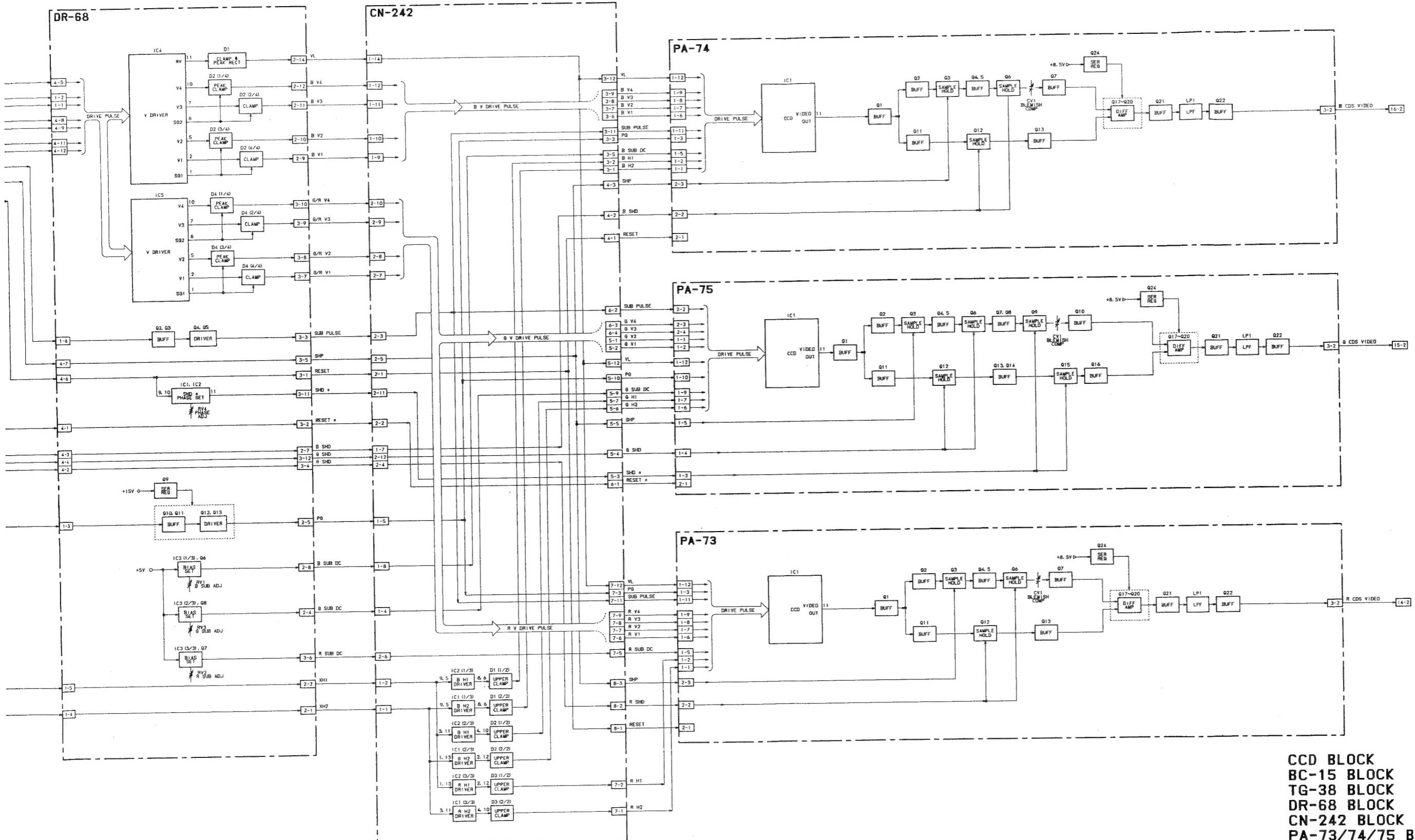
SECTION A
BLOCK DIAGRAMS



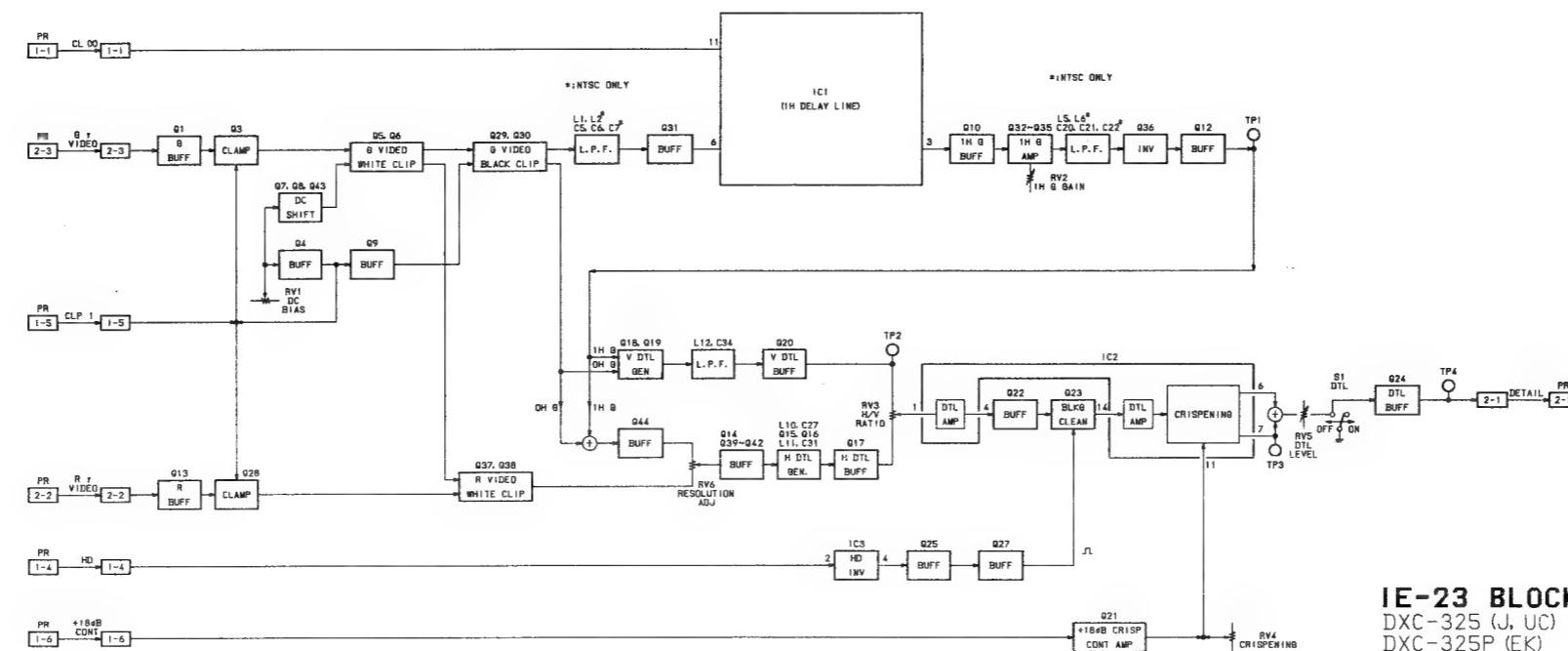


CCD BLOCK





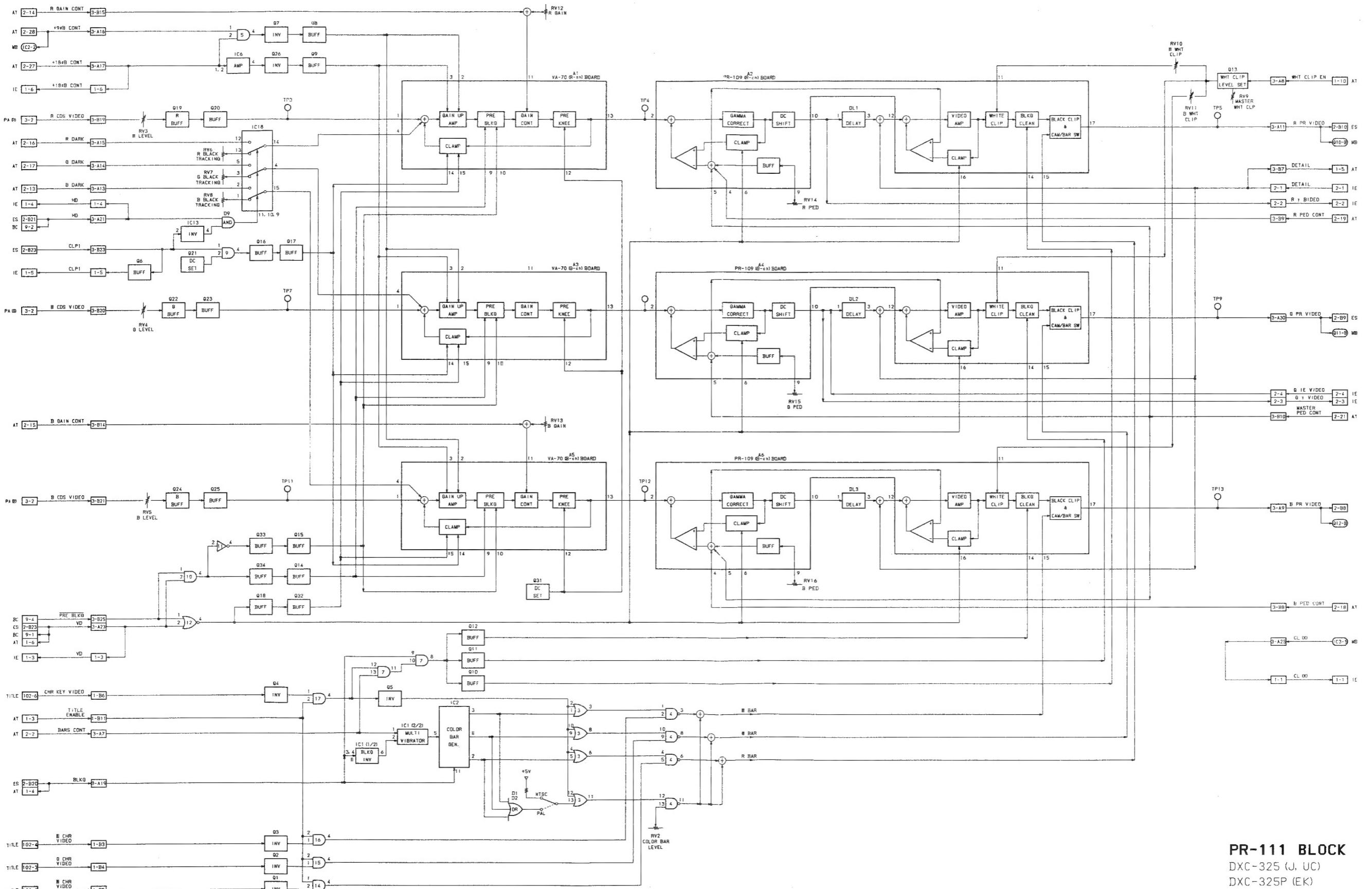
CCD BLOCK
BC-15 BLOCK
TG-38 BLOCK
DR-68 BLOCK
CN-242 BLOCK
PA-73/74/75 BLOCK
DXC-325 (J, UC)
DXC-325P (EK)

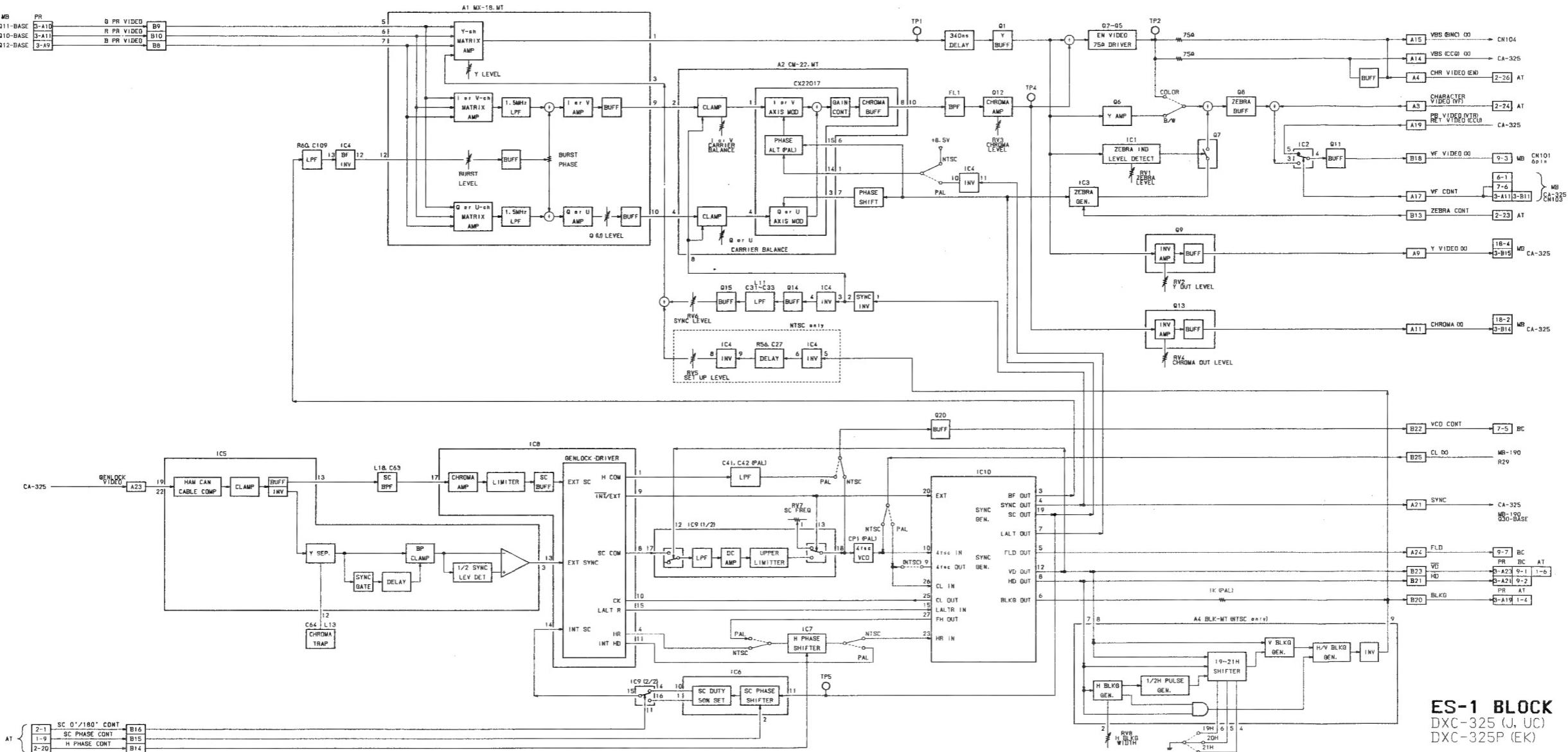


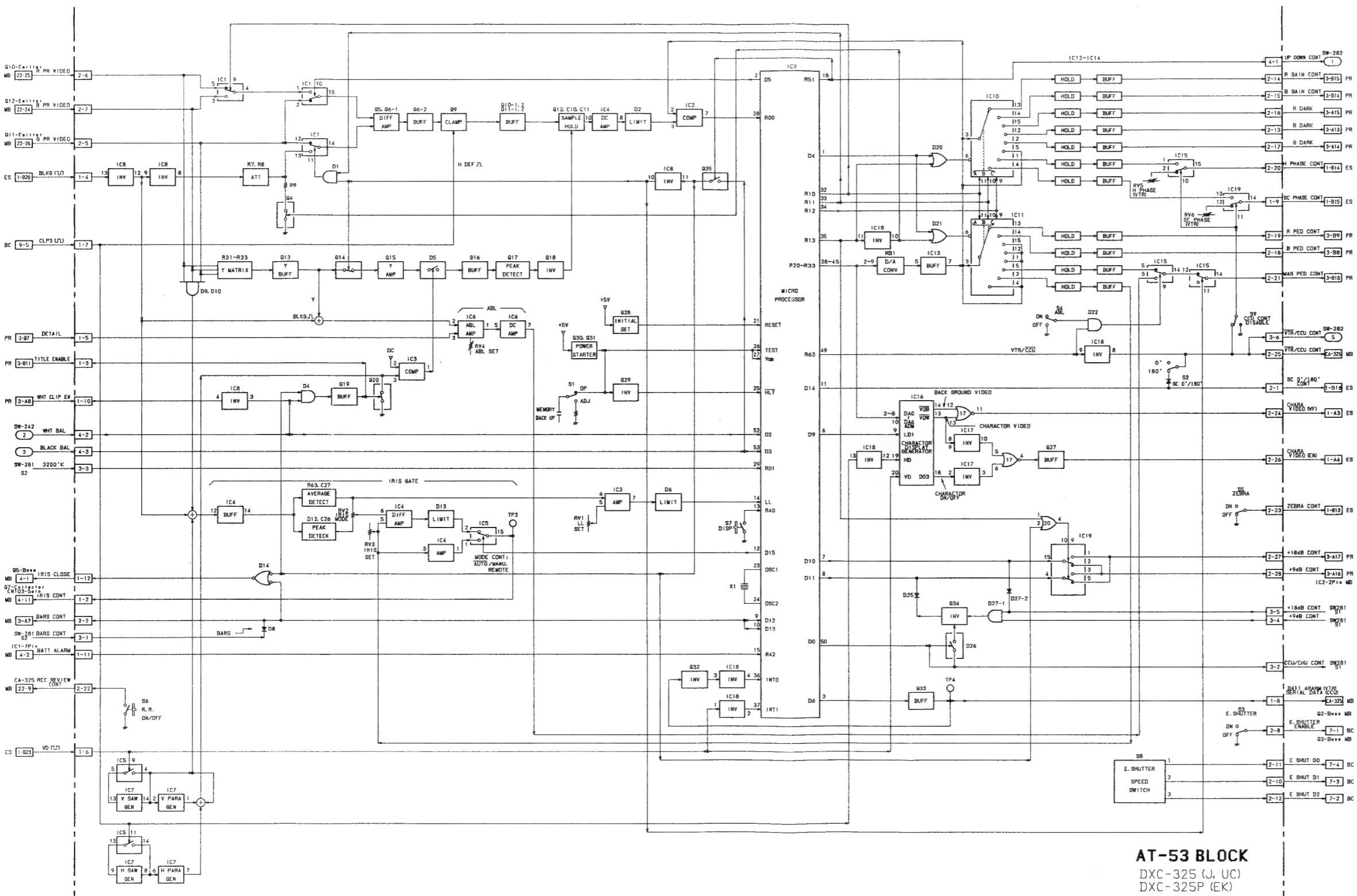
IE-23 BLOCK
DXC-325 (J, UC)
DXC-325P (EK)

PR-111 BLOCK

PR-111 BLOCK







AT-53 BLOCK
DXC-325 (J, UC)
DXC-325P (EK)

SECTION B

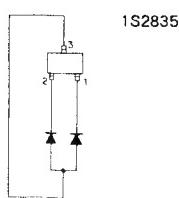
SEMICONDUCTOR

The circuit diagram of is obtained from the IC data book published by the manufacturer.

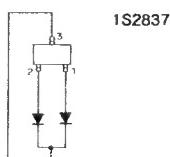
TYPE	PAGE	TYPE	PAGE
1S2835	B-2	NJM1496M	B-11
1S2837	B-2	NJM2903M	B-11
1S955	B-2	NTM2369	B-2
ISS119	B-2	RD? ?M-B?	B-2
ISS123	B-2	SN74LS221NS	B-11
2SA1226	B-2	TC4001BF	B-11
2SA1462	B-2	TC4051BF	B-11
2SA812	B-2	TC4053BF	B-11
2SB798	B-2	TC4069UBF	B-11
2SC1623	B-2	TC40H000F	B-12
2SC2757	B-2	TC40H008F	B-12
2SD999	B-2	TC40H027F	B-12
2SK94	B-2	TC40H032F	B-12
3SK163	B-2	TC40H076AF	B-12
BX1340	B-3	TC40H193F	B-12
CX22017	B-3	TC4S01F	B-12
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CX815	B-5	TC4S71F	B-13
CXA1065M	B-5	TC4S81F	B-13
CXD1155Q	B-6	TC4SU69F	B-13
CXD1251Q	B-9	TC74HC04F	B-13
DTA114YK	B-2	TC74HC08F	B-13
DTC114YK	B-2	TC74HC14F	B-13
HD44860B42	B-9	TC74HC27F	B-13
HZ? ALL	B-2	TC74HC74F	B-13
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MN1237AD	B-10	μPC324G2	B-14
MN3801	B-11	μPC358G2	B-14
DXC-325(J, UC)		μPD4053BG	B-11
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		XN6401	B-2
		XN6435	B-2
		XN6501	B-2

DIODE, TRANSISTOR

TOP VIEW (SCALE 4/1)



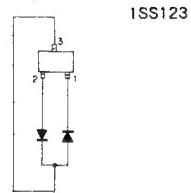
TOP VIEW (SCALE 4/1)



1S955



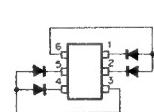
TOP VIEW (SCALE 4/1)



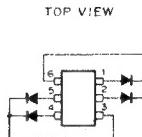
ISS123

HZ 7 ALL
HZ 7 BLL

TOP VIEW



MA122



MA123

TOP VIEW (SCALE 4/1)

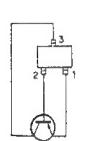


RD 7 7 MB 7

ISS119

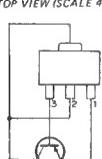


TOP VIEW (SCALE 4/1)



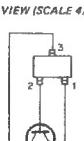
2SA1226
2SA1462
2SA812

TOP VIEW (SCALE 4/1)



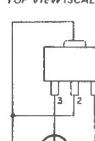
2SB798

TOP VIEW (SCALE 4/1)



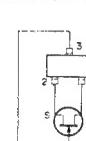
2SC1623
2SC2757
NTM2369

TOP VIEW (SCALE 4/1)



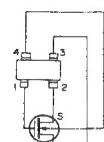
2SD999

TOP VIEW (SCALE 4/1)



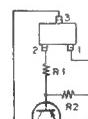
2SK94

TOP VIEW (SCALE 4/1)



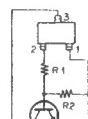
3SK163

TOP VIEW (SCALE 4/1)



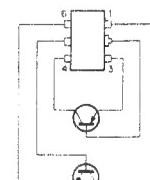
DTC114YK (R1 = 10K, R2 = 47K)

TOP VIEW (SCALE 4/1)

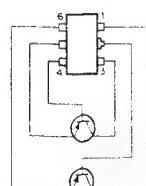


DTA114YK (R1 = 10K, R2 = 47K)

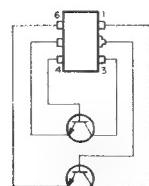
TOP VIEW (SCALE 4/1)



XN4608



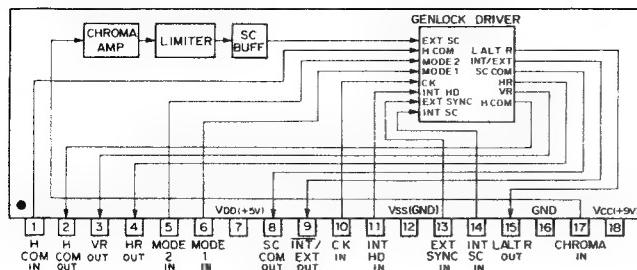
XN6401
XN6435



XN6501

BX1340 (SONY)

SC LIMITER AND GENLOCK DRIVER
- REAR VIEW -



MODE SELECTION

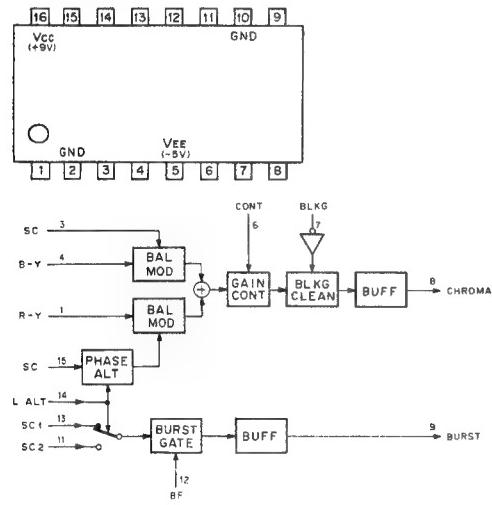
MODE 1	MODE 2	MODE
1	1	NTSC
0	0	PAL

0: LOW LEVEL
1: HIGH LEVEL

CX22017 (SONY)

VIDEO SIGNAL PROCESSOR

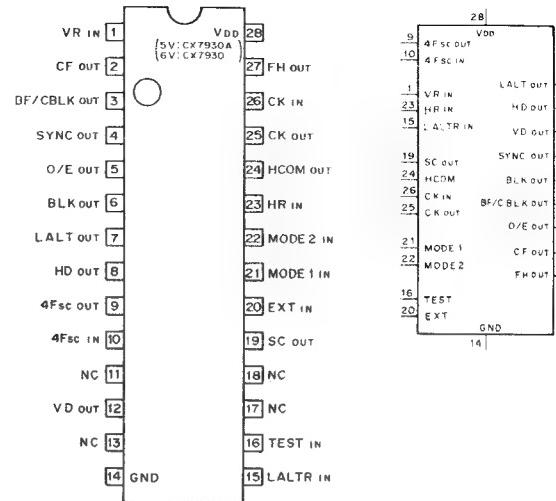
- TOP VIEW -



DXC-325(J, UC)
DXC-325P(EK)

CX7930A (SONY) FLAT PACKAGE

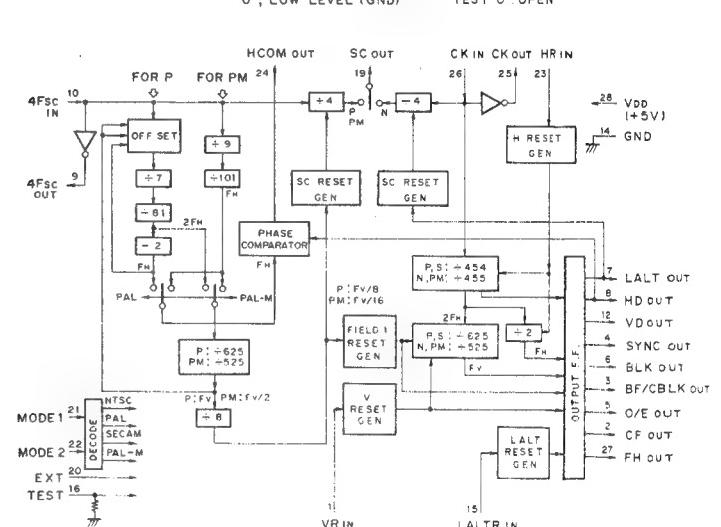
C-MOS SYNC GENERATOR (NTSC, PAL-M, PAL, SECAM)
- TOP VIEW -



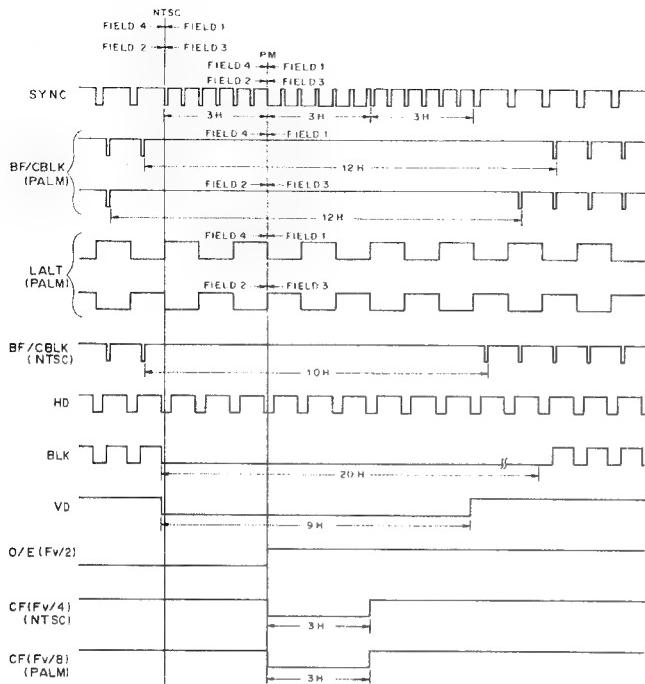
O/E : ODD/EVEN FIELD
CF : COLOR FRAME PULSE
HCOM : H COMPARATOR

SYSTEM	4Fsc	CLOCK
NTSC	910 FH	910 FH
PAL	1135 FH + 2Fv	908 FH
PAL-M	909 FH	910 FH
SECAM	—	908 FH

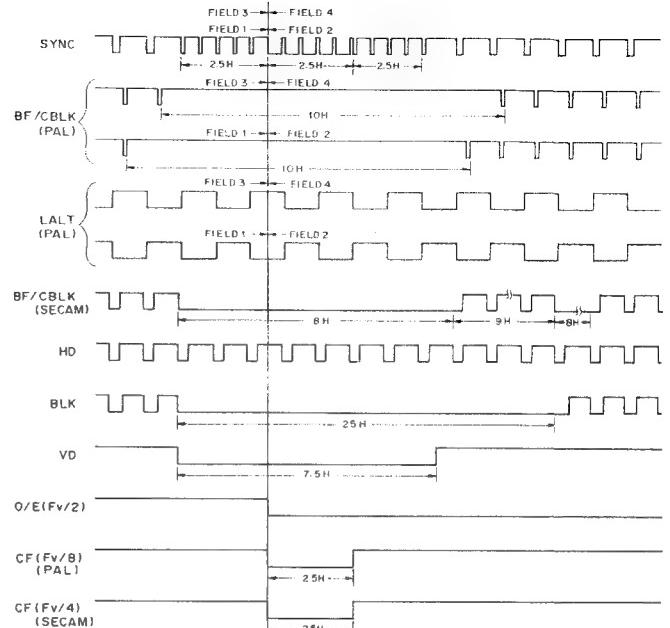
INPUTS	SYSTEM	INPUTS	FUNCTION
MODE 1	MODE 2	EXT TEST	INTERNAL
0 0	0	0 1	SECAM
0	1	1 0	PAL-M
1	1	1 1	PAL
0 ; LOW LEVEL (GND)	TEST '0' : OPEN	TEST '1' : OPEN	



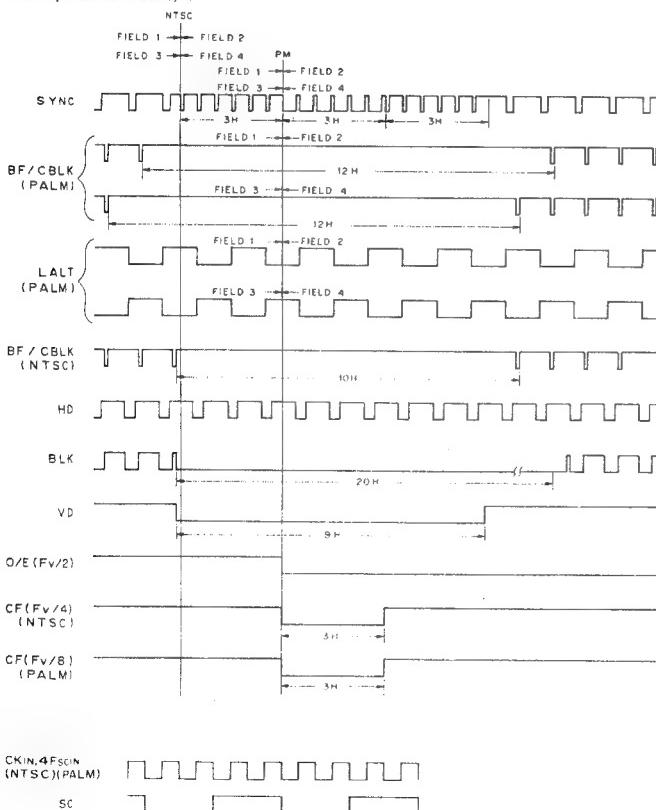
NTSC, PAL-M (FIELD 1,3)



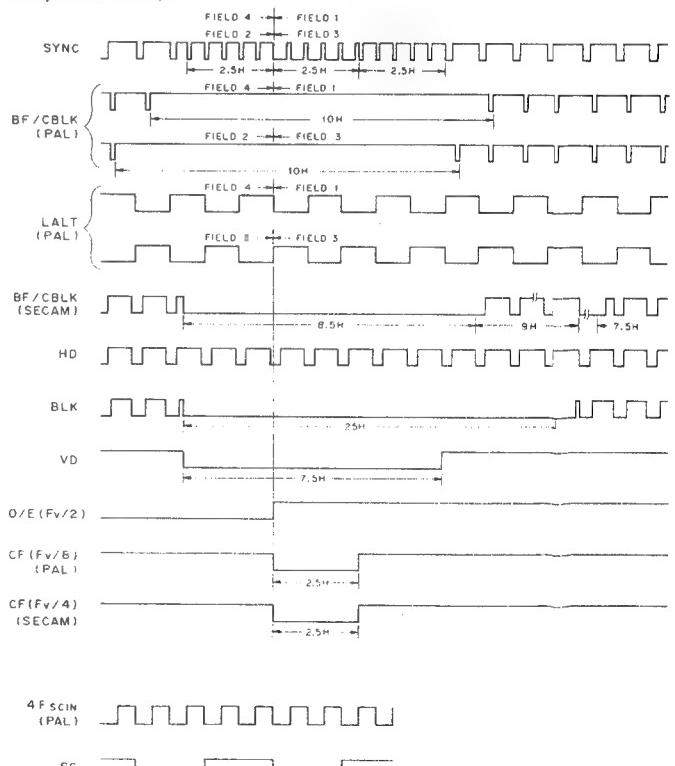
PAL, SECAM (FIELD 4,2)



NTSC, PAL-M (FIELD 2,4)

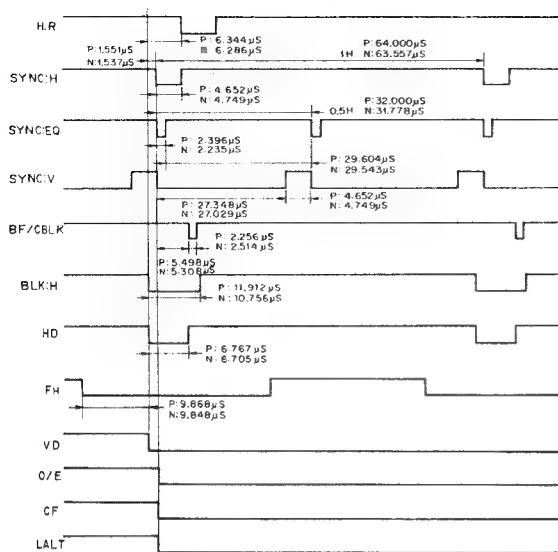


PAL, SECAM (FIELD 1,3)

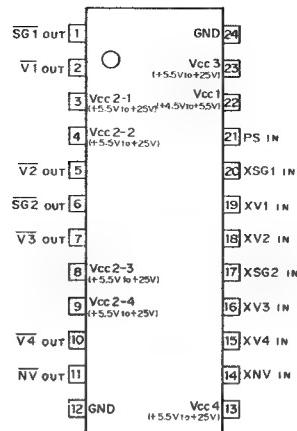


CKIN,4FSIN
(NTSC)(PALM)

P: PAL, SECAM
N: NTSC, PALM

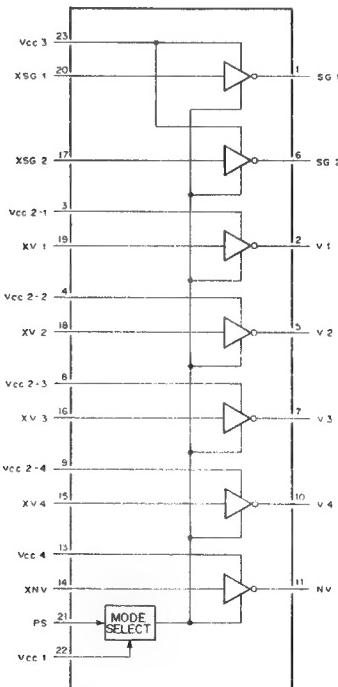
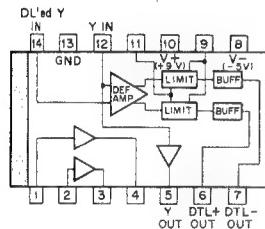


CXA1065M (SONY) FLAT PACKAGE
INVERTING DRIVER FOR CCD CLOCK WITH POWER SAVE
— TOP VIEW —



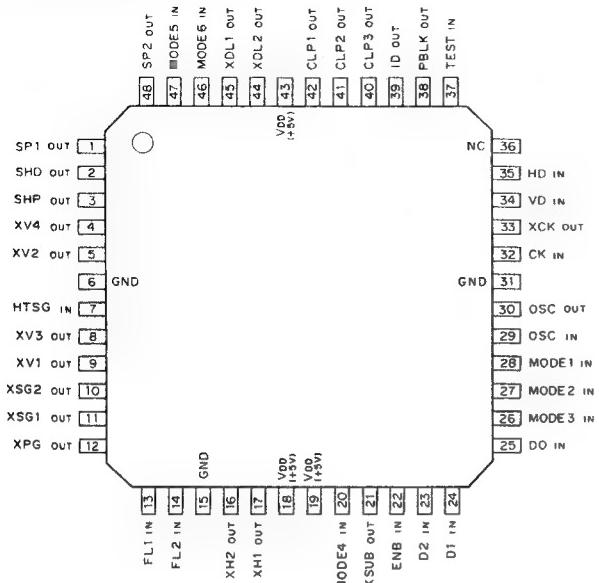
XV1-XV4 ; VERTICAL REGISTER TRANSMISSION CLOCK INPUT
V1 - V4 ; VERTICAL REGISTER TRANSMISSION CLOCK OUTPUT
XSG1,XSG2; SENSER GATE PULSE INPUT
SG1,SG2; SENSER GATE PULSE OUTPUT
XNV; DRIVER INPUT
NV; DRIVER OUTPUT
PS; POWER SAVE INPUT
Vcc1;BIAS VOLTAGE
Vcc 2-1;V1 OUTPUT PULSE VOLTAGE
Vcc 2-2;V2 OUTPUT PULSE VOLTAGE
Vcc 2-3;V3 OUTPUT PULSE VOLTAGE
Vcc 2-4;V4 OUTPUT PULSE VOLTAGE
Vcc 3;SG1,SG2 OUTPUT PULSE VOLTAGE
Vcc 4;NV OUTPUT PULSE VOLTAGE

CX815 (SONY)
DTL AMPLIFIER
— TOP VIEW —



CXD1155Q (SONY) FLAT PACKAGE

C-MOS TIMING PULSE GENERATOR FOR CCD CAMERA
- TOP VIEW -



MODE SELECTION

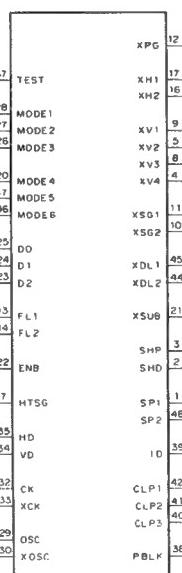
	H	L
FL1	NORMAL	FLICKERLESS
FL2	50Hz	60Hz
MODE1	B/W	COLOR
MODE2	FRAME	FIELD
MODE3	CCIR	NTSC
MODE4	PARALLEL INPUT	SERIAL INPUT

* MODE5, MODE6 : SEE TIMING CHART

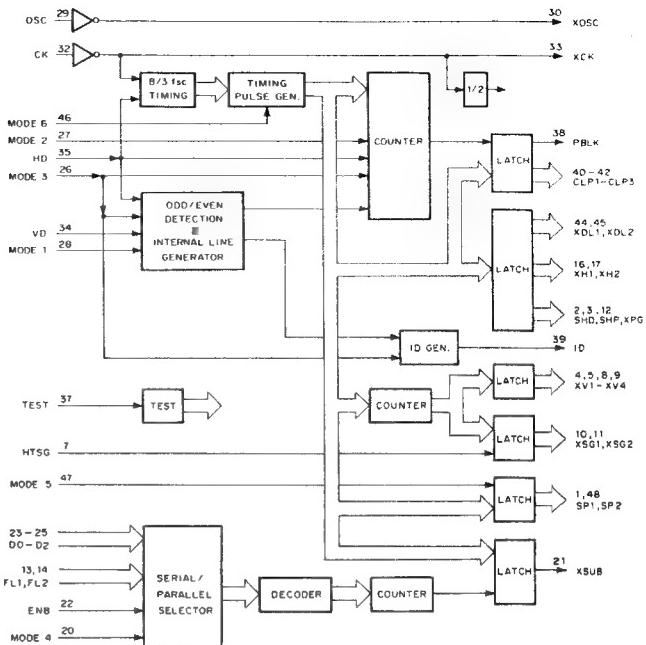
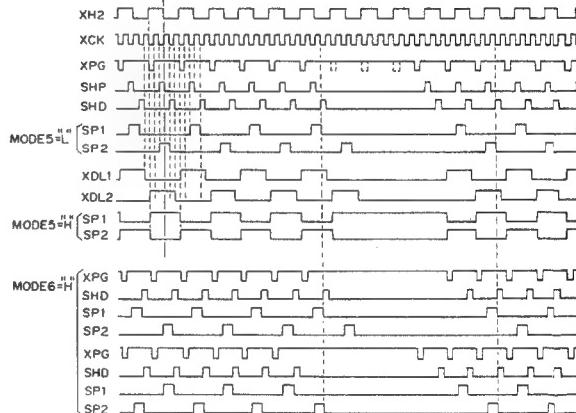
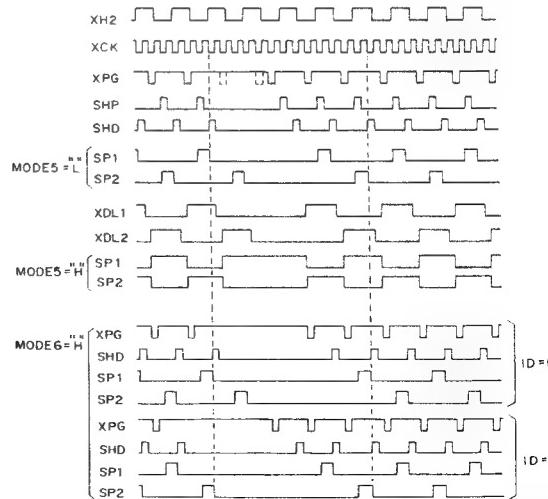
PARALLEL INPUT MODE (MODE4="H")

		INPUTS		SHUTTER SPEED(S)	
MODE4	ENB	FL1	FL2	D2	D1
1	1	1	X	0	0
1	1	1	X	0	1
1	1	1	X	0	1/250
1	1	1	X	0	1/500
1	1	1	X	1	0
1	1	1	X	1	1/1000
1	1	1	X	1	1/2000
1	1	1	X	1	1/4000
1	1	1	X	1	1/10000
X	1	0	1	X	X
X	1	0	0	X	X
X	0	X	X	X	X
					NORMAL

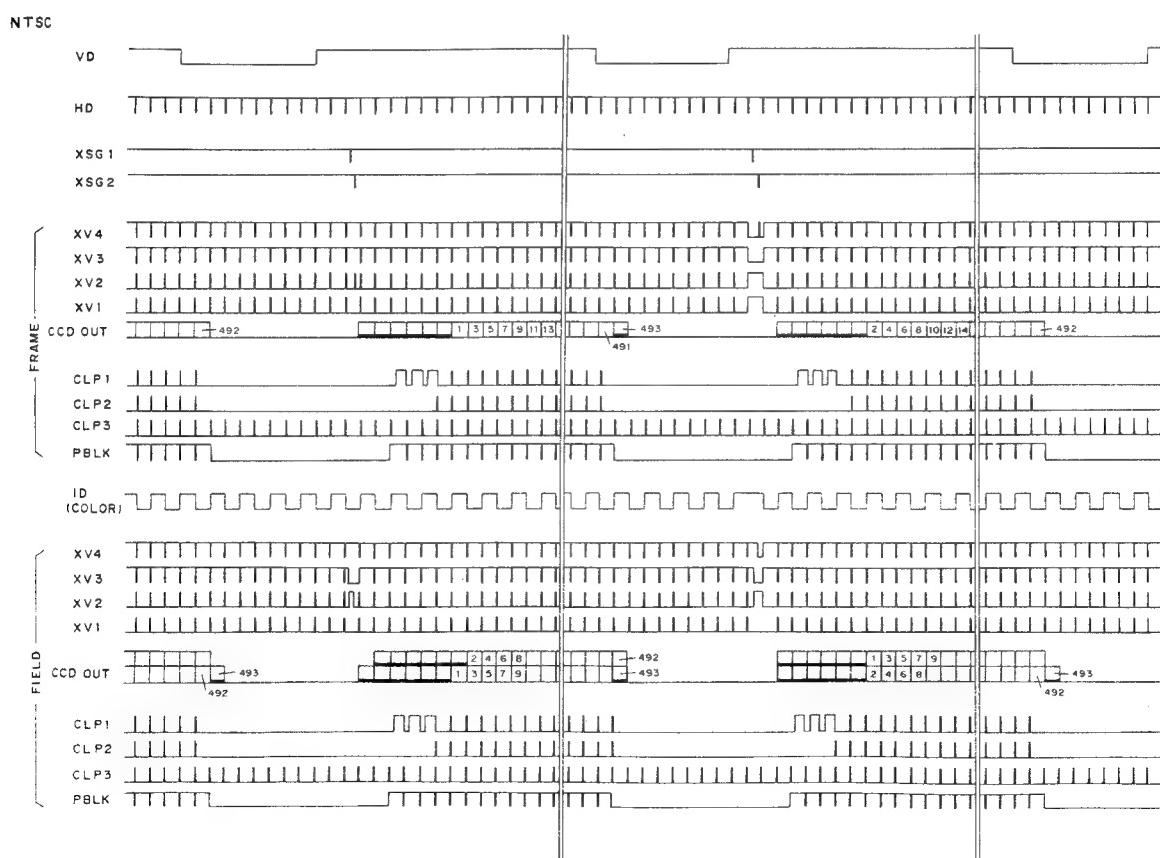
1 : HIGH LEVEL
0 : LOW LEVEL
X : DON'T CARE



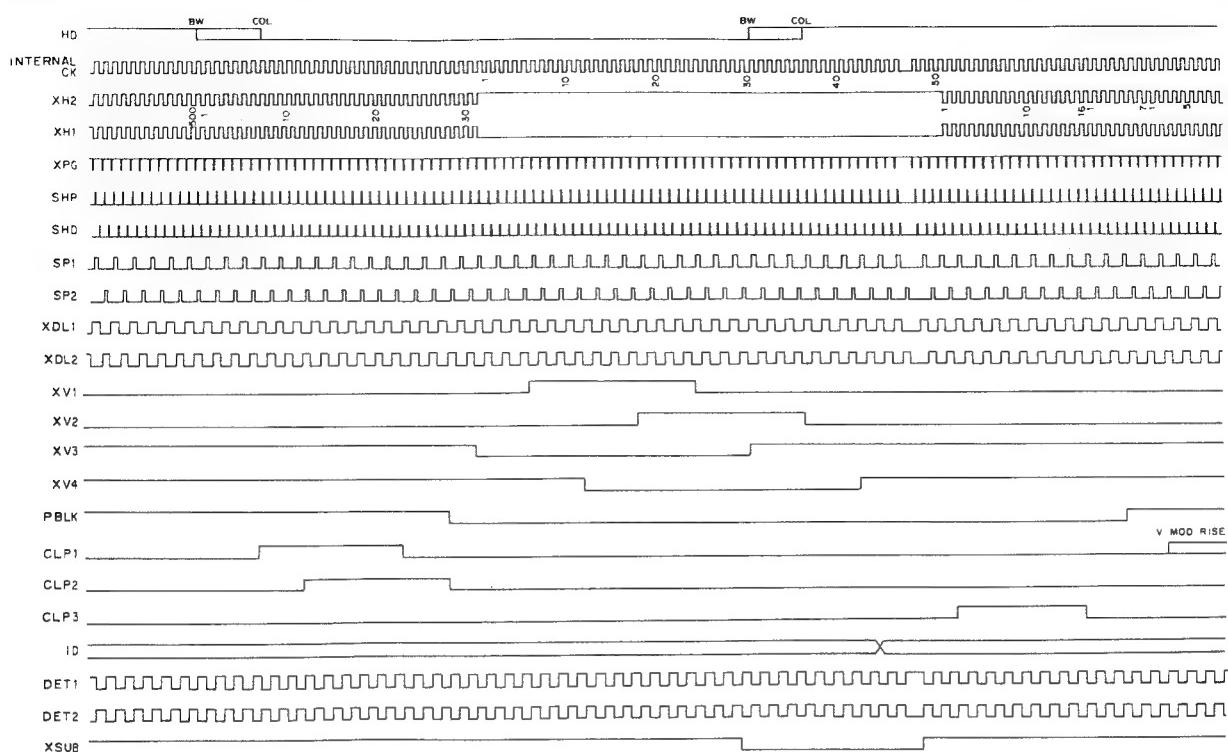
ENB : ELECTRONIC SHUTTER ENABLE INPUT
DO-D2 : SHUTTER SPEED MODE SIGNAL INPUT
SHD : DATA SAMPLE HOLD PULSE
SHP : PRE-CHARGE LEVEL SAMPLE HOLD PULSE
XV1-XV4 : VERTICAL REGISTER TRANSMISSION CLOCK OUTPUT
XH1,XH2 : HORIZONTAL REGISTER TRANSMISSION CLOCK OUTPUT
XSG1,XSG2 : SENSOR GATE PULSE OUTPUT
XDL1,XDL2 : DELAY LINE CONTROL PULSE OUTPUT
XPG : PRE-CHARGE GATE PULSE OUTPUT
SP1,SP2 : COLOR SEPARATION PULSE OUTPUT
CLP1-CLP3 : CLAMPE PULSE OUTPUT
ID : LINE DISCRIMINATION PULSE OUTPUT
HTSG : READ OUT STOP SIGNAL INPUT
TEST : TEST MODE SIGNAL INPUT
OSC : OSCILLATING SIGNAL INPUT
XOSC : INVERTED OSCILLATING SIGNAL OUTPUT
CK : CLOCK INPUT
XCK : INVERTED CLOCK OUTPUT
PBLK : BLANKING CLEANING PULSE OUTPUT
XSUB : ELECTRIC CHARGE DISCHARGING PULSE OUTPUT
HD : HORIZONTAL DRIVE INPUT
VD : VERTICAL DRIVE INPUT

HIGH SPEED SYSTEM TIMING
NTSCHIGH SPEED SYSTEM TIMING
CCIR

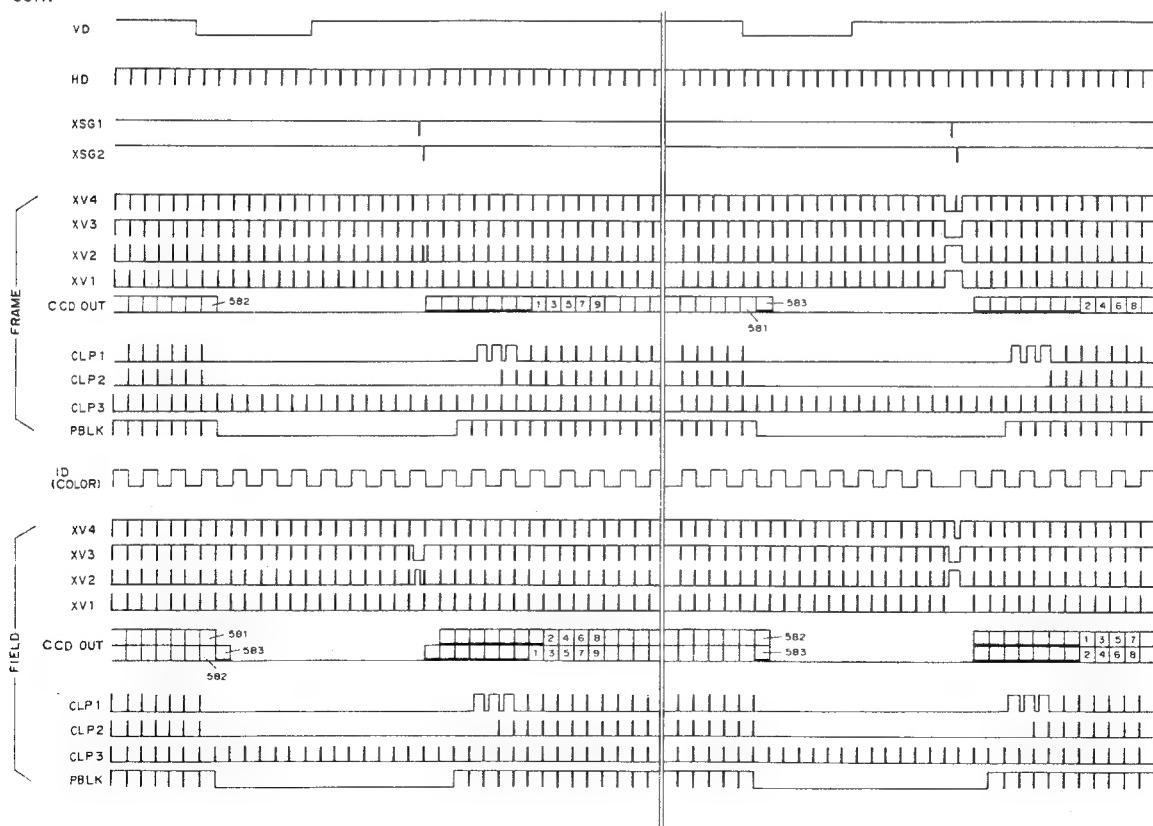
DXC-325 (J, UC)
DXC-325 P(EK)



CCIR

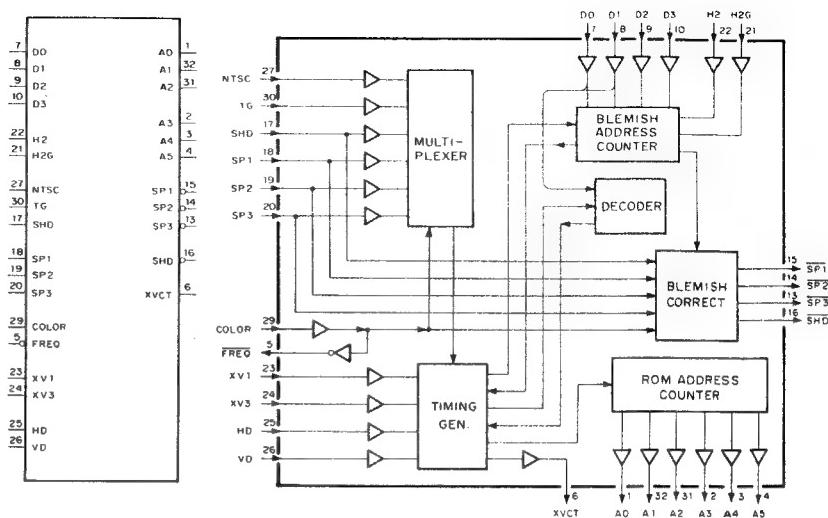
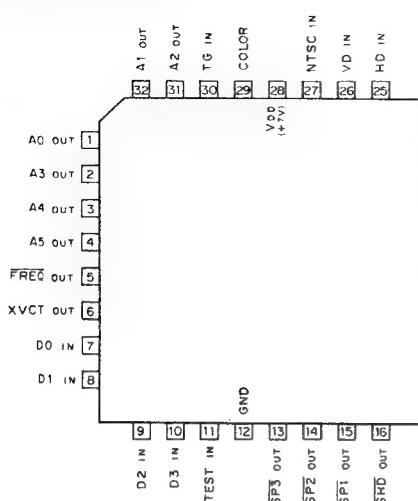


CCIR



CXD1251Q (SONY)

C-MOS BLEMISH CORRECTOR FOR CCD IMAGER
- TOP VIEW -



MODE SELECTION	
	1
NTSC	CCIR MODE
COLOR	B/W MODE
TG	IC FOR TG: CXD1149 USE
	0
	NTSC MODE
	COLOR MODE
	IC FOR TG: CXD1155/1156 USE

1 ; HIGH LEVEL
0 ; LOW LEVEL

```

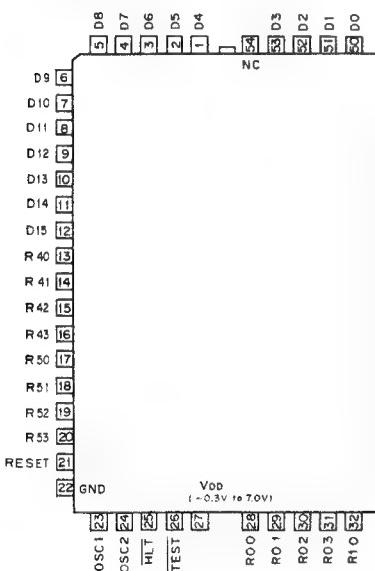
D1-D4 : EXTERNAL ROM DATA INPUT
A0-A5 : EXTERNAL ROM ADDRESS OUTPUT
SP1-SP3 : SAMPLE HOLD PULSE FOR BLEMISH CORRECTION
SHD : DATA SAMPLE HOLD PULSE
H2, H2G : CLOCK INPUT FOR HORIZONTAL REGISTER TRANSMISSION
XV1, XV3 : CLOCK INPUT FOR VERTICAL REGISTER TRANSMISSION
XVCT : POWER CONTROL OUTPUT FOR EXTERNAL ROM
HD : HORIZONTAL DRIVE INPUT
VD : VERTICAL DRIVE INPUT

```

HD44860B42 (HITACHI) FLAT PACKAGE

C-MOS 4-BIT MICROPROCESSOR

- TOP VIEW -

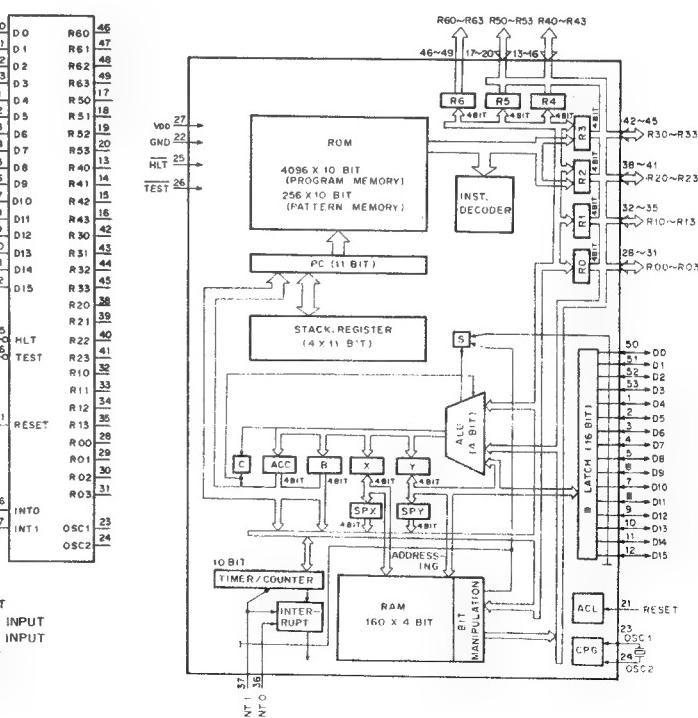


```

DO-015 ; DATA INPUT/OUTPUT
R00-R03;
R10 -R13; }
R20 -R23; } REGIST INPUT/OUT
R30 -R33;
R40 -R43;
R50 -R53;
R60 -R63; REGIST OUTPUT

```

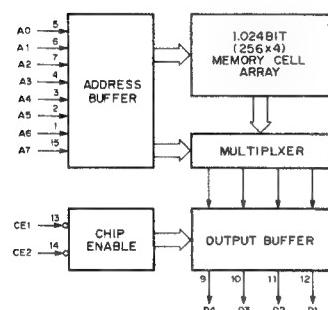
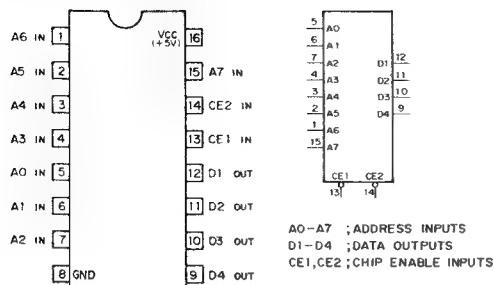
RESET	:	RESET INPUT
OSC1,OSC2	:	OSCILLATOR INPUT
INTO,INT1	:	INTERRUPT INPUT
TEST	:	TEST INPUT
HLT	:	HALT INPUT



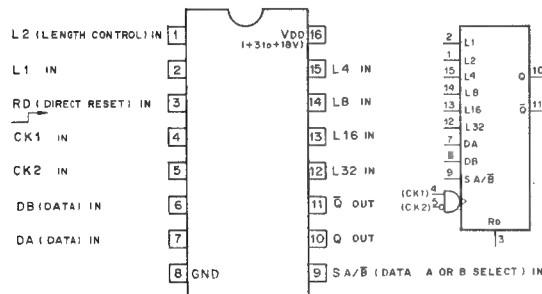
MB7114LPF (FUJITSU) (ACCESS TIME = 50nS) FLAT PACKAGE

1024-BIT (256x4) PROM

- TOP VIEW -



MC14557BF (MOTOROLA) FLAT PACKAGE

C-MOS 1-TO-64-BIT VARIABLE LENGTH SHIFT REGISTER
- TOP VIEW -

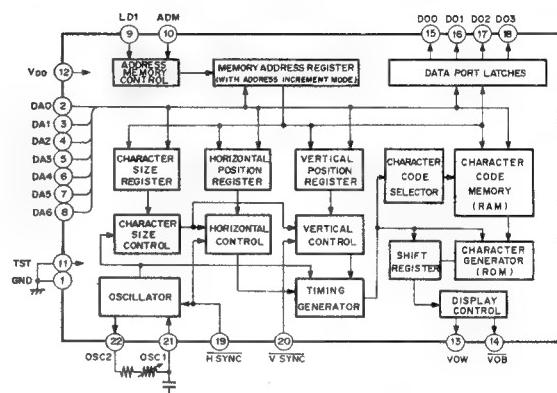
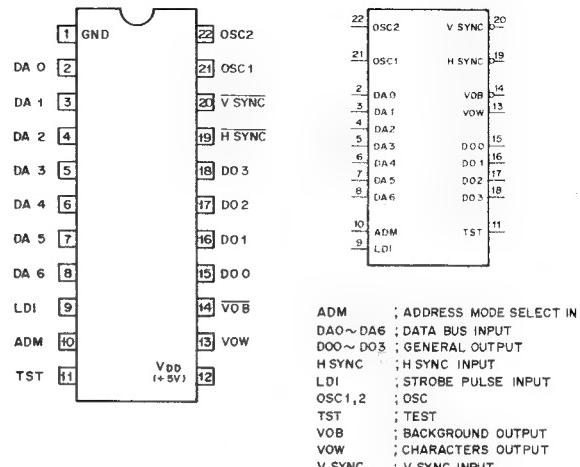
LENGTH SELECT TRUTH TABLE

L32	L16	LB	L4	L2	L1	REGISTER LENGTH
0	0	0	0	0	0	1-BIT
0	0	0	0	0	1	2-BIT
0	0	0	0	1	0	3-BIT
0	0	0	0	1	1	4-BIT
0	0	0	1	0	0	5-BIT
...
1	1	1	1	0	0	61-BIT
1	1	1	1	0	1	62-BIT
1	1	1	1	1	0	63-BIT
1	1	1	1	1	1	64-BIT

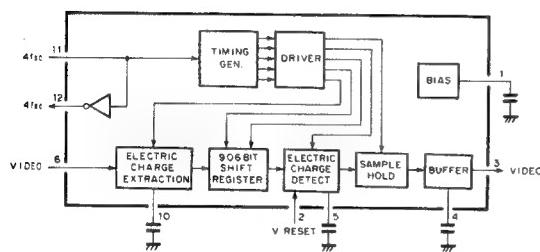
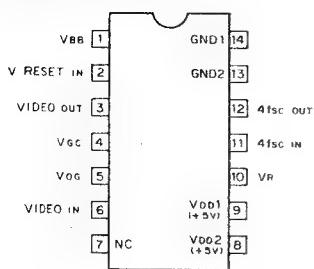
INPUTS	OUTPUT
RD S/A CK1 CK2	Q
0 0 0 1 0 0	DB
0 1 1 1 0 0	DA
0 0 1 1 1 0	DB
0 1 1 1 1 0	DA
1 X X X X	0

0 : LOW LEVEL
1 : HIGH LEVEL
X : DON'T CARE

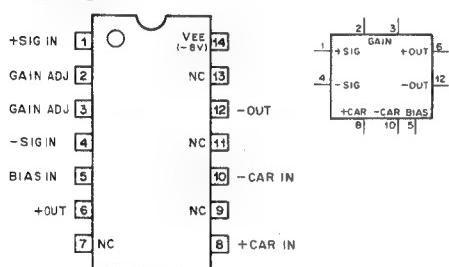
MN1237AD (MATSUSHITA)

C-MOS INDICATES DATA OF 60 CHARACTERS CRT INTERFACE
- TOP VIEW -

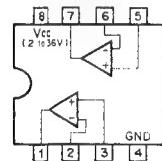
MN3801 (MATSUSHITA)

C-MOS CCD 1H DELAY LINE FOR NTSC
- TOP VIEW -

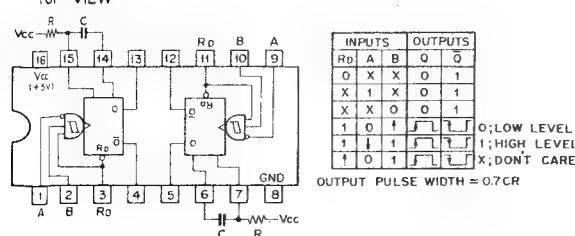
NJM1496M (JRC) FLAT PACKAGE

BALANCED MODULATOR/DEMODULATOR
- TOP VIEW -

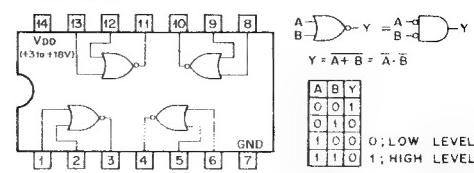
NJM2903M (JRC) FLAT PACKAGE

OPERATIONAL AMPLIFIER
- TOP VIEW -

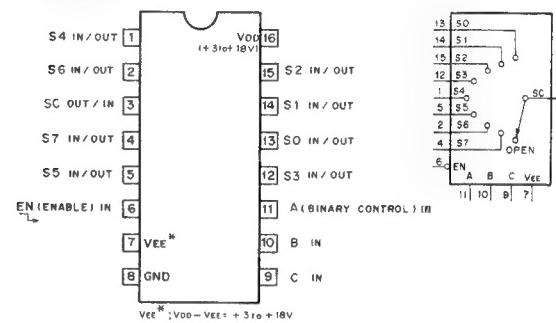
SN74LS221NS (TI) FLAT PACKAGE

TTL MONOSTABLE MULTIVIBRATOR WITH SCHMITT TRIGGER INPUT
- TOP VIEW -DXC-325(J, UC)
DXC-325P(EK)

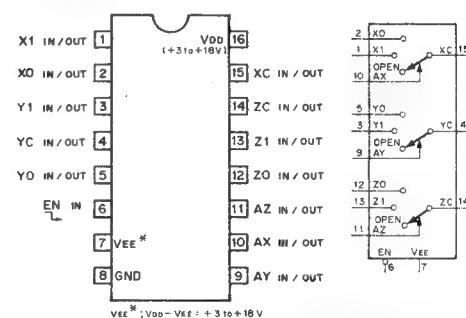
TC4001BF (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT NOR GATE
- TOP VIEW -

TC4051BF (TOSHIBA) FLAT PACKAGE

C-MOS 8-CHANNEL MULTIPLEXER/DEMUTIPLEXER
- TOP VIEW -

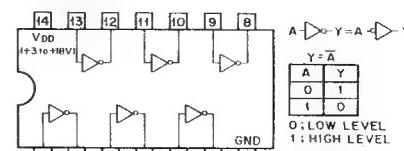
TC4053BF (TOSHIBA) FLAT PACKAGE

uPD4053BG (NEC) FLAT PACKAGE
C-MOS 2-CHANNEL MULTIPLEXER/DEMUTIPLEXER
- TOP VIEW -

TC4069UBF (TOSHIBA) FLAT PACKAGE

C-MOS INVERTER

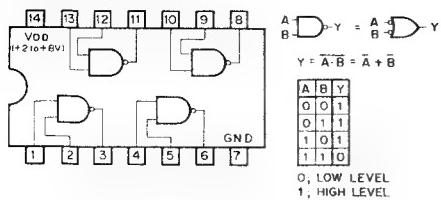
- TOP VIEW -



TC40H000F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT NAND GATE

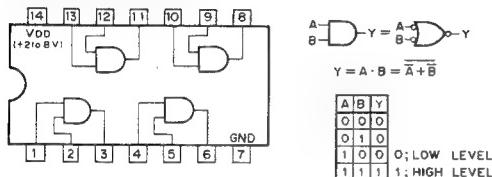
- TOP VIEW -



TC40H008F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT POSITIVE-AND GATE

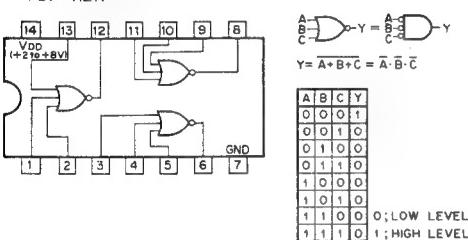
- TOP VIEW -



TC40H027F (TOSHIBA) FLAT PACKAGE

C-MOS 3-INPUT POSITIVE-NOR GATE

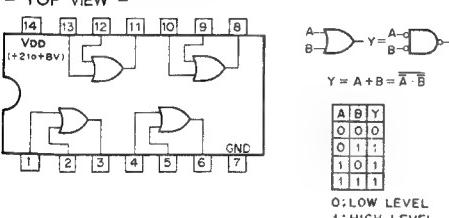
- TOP VIEW -



TC40H032F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT POSITIVE-OR GATE

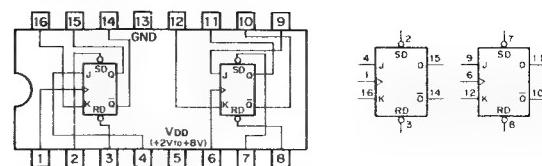
- TOP VIEW -



TC40H076AF (TOSHIBA) FLAT PACKAGE

C-MOS HIGH SPEED EDGE TRIGGER TYPE J-K FLIP-FLOP WITH DIRECT SET/RESET

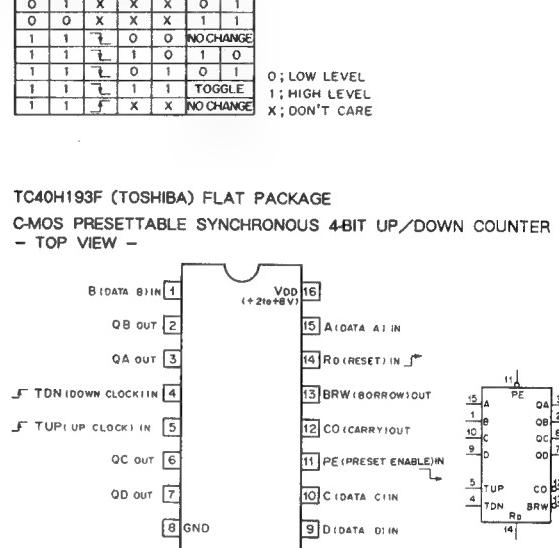
- TOP VIEW -



TC40H193F (TOSHIBA) FLAT PACKAGE

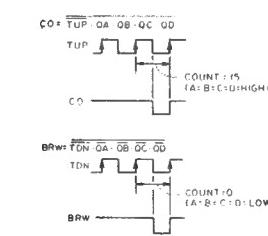
C-MOS PRESETTABLE SYNCHRONOUS 4-BIT UP/DOWN COUNTER

- TOP VIEW -



CONTROL INPUTS		MODE
RD	PE	TUP TDN
1	X	X
0	0	X
0	1	X
0	1	1
0	1	1
1	1	1

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE.



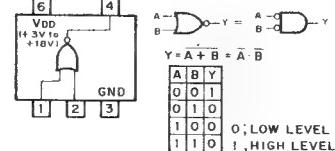
COUNT	OUTPUTS			
	OD	QC	OB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

UP COUNT
DOWN COUNT

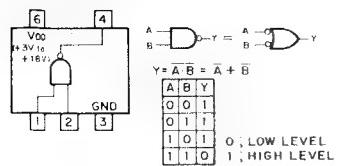
TC4S01F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT NOR GATE

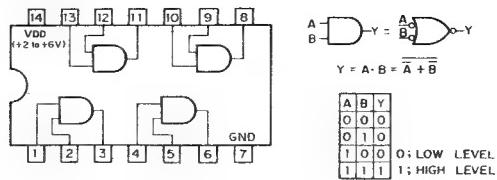
- TOP VIEW -



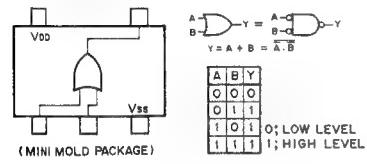
TC4S11F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT AND GATE
- TOP VIEW -

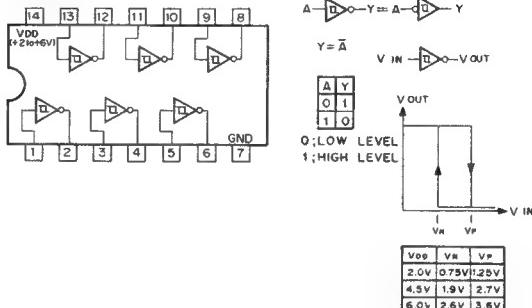
TC74HC08F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT AND GATE
- TOP VIEW -

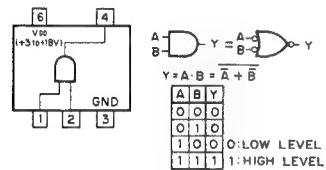
TC4S71F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT OR GATE
- TOP VIEW -

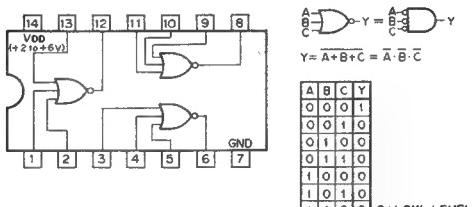
TC74HC14F (TOSHIBA) FLAT PACKAGE

C-MOS SCHMITT TRIGGER INVERTER
- TOP VIEW -

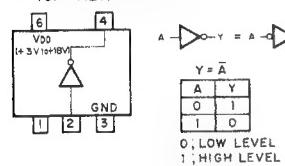
TC4S81F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT AND GATE
- TOP VIEW -

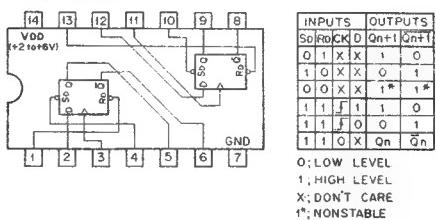
TC74HC27F (TOSHIBA) FLAT PACKAGE

C-MOS 3-LINE POSITIVE-NOR GATE
- TOP VIEW -

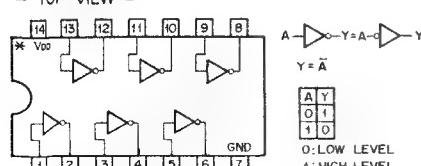
TC4SU69F (TOSHIBA) FLAT PACKAGE

C-MOS INVERTER BUFFER
- TOP VIEW -

TC74HC74F (TOSHIBA) FLAT PACKAGE

C-MOS D-TYPE FLIP FLOP WITH DIRECT SET/RESET
- TOP VIEW -

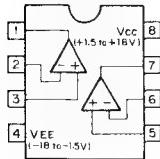
TC74HC04F (TOSHIBA) FLAT PACKAGE

C-MOS INVERTER
- TOP VIEW -* V_{DD} HC, HCU; +2 to +6V
HCT; +5V

TL062ACPS (TI) FLAT PACKAGE

OPERATIONAL AMPLIFIER
(J FET INPUT)

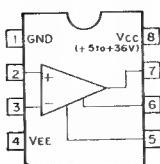
- TOP VIEW -



uPC311G2 (NEC) FLAT PACKAGE

VOLTAGE COMPARATOR

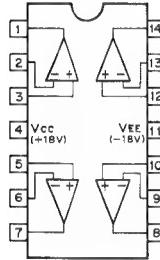
- TOP VIEW -



TL084CNS (TI) FLAT PACKAGE

OPERATIONAL AMPLIFIER
(J FET-INPUT)

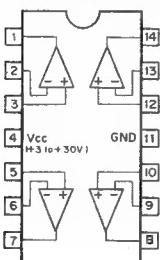
- TOP VIEW -



uPC324G2 (NEC) FLAT PACKAGE

QUAD. OP AMPLIFIER

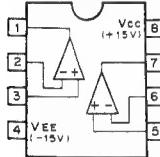
- TOP VIEW -



TL082CPS (TI) FLAT PACKAGE

OPERATIONAL AMPLIFIER
(J FET-INPUT)

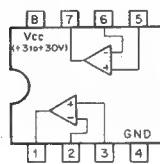
- TOP VIEW -



uPC358G2 (NEC) FLAT PACKAGE

DUAL OPERATIONAL AMPLIFIERS

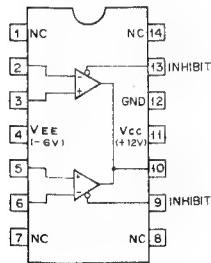
- TOP VIEW -



uA711CNS (TI)

VOLTAGE COMPARATOR

- TOP VIEW -

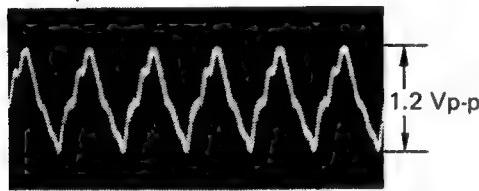


IE-23

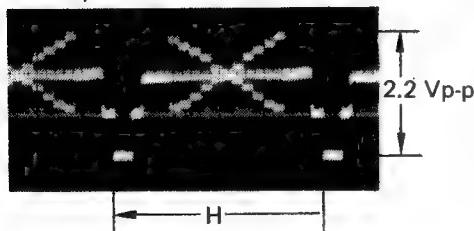
NOTE:

1. All voltage are dc, measured with a digital voltmeter. (input impedance: $10M\Omega$)
2. All waveforms are taken and DC voltage is measured in condition below.
 - Set camera FILTER selector to 1 position.
 - Set camera BARS/WB selector to 3200°K position.
 - Set camera GAIN selector to 0dB position.
 - Set camera S1 switch/IE-23 board (DTL ON/OFF) to ON position.
 - Shoot the grayscale chart. Adjust lens iris so that a white level is 100IRE (For NTSC) or 700mV (For PAL) on the waveform monitor.

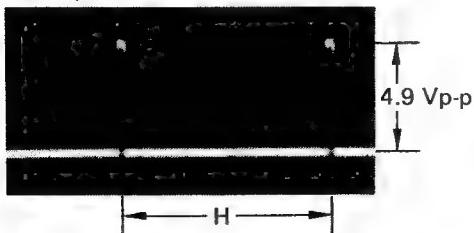
CN1-1pin



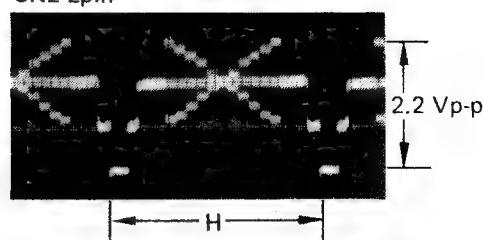
CN2-3 pin



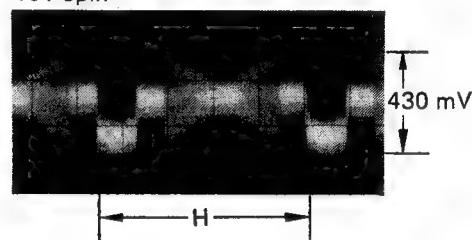
CN1-5pin



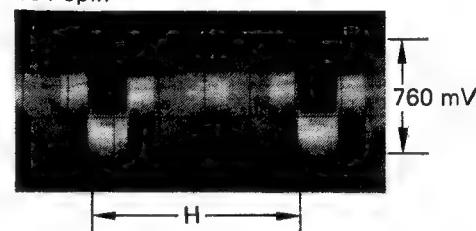
CN2-2pin



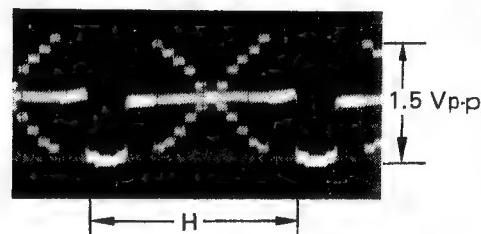
IC1-6pin



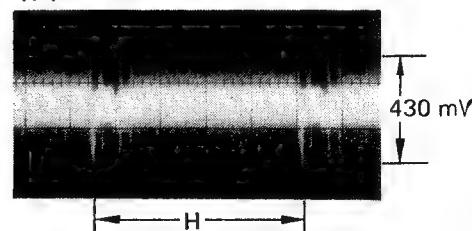
IC1-3pin



TP1



TP4

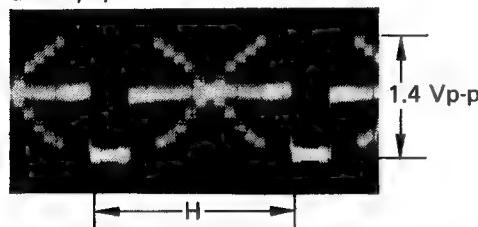


AT-53

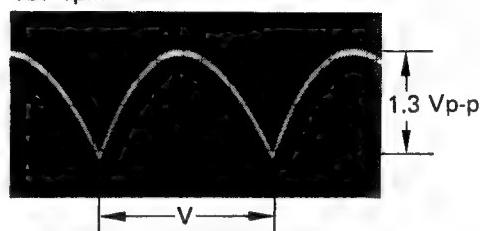
NOTE:

1. All voltage are dc, measured with a digital voltmeter. (input impedance: $10M\Omega$)
2. All waveforms are taken in condition below.
Shoot the grayscale pattern on the pattern box. Adjust lens iris so that a white level is 100IRE (For NTSC) or 700mV (For PAL) using the waveform monitor.

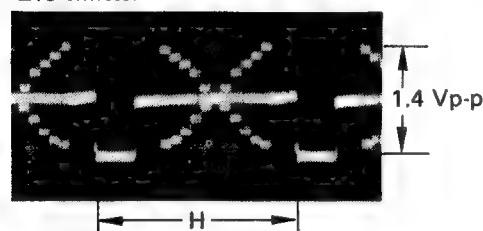
CN2-5, 6, 7



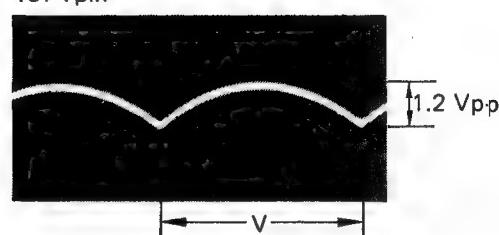
IC7-1pin



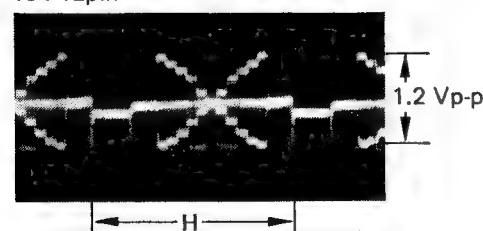
Q13-emitter



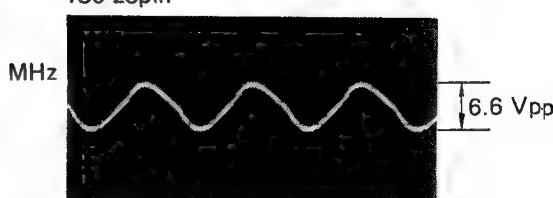
IC7-7pin



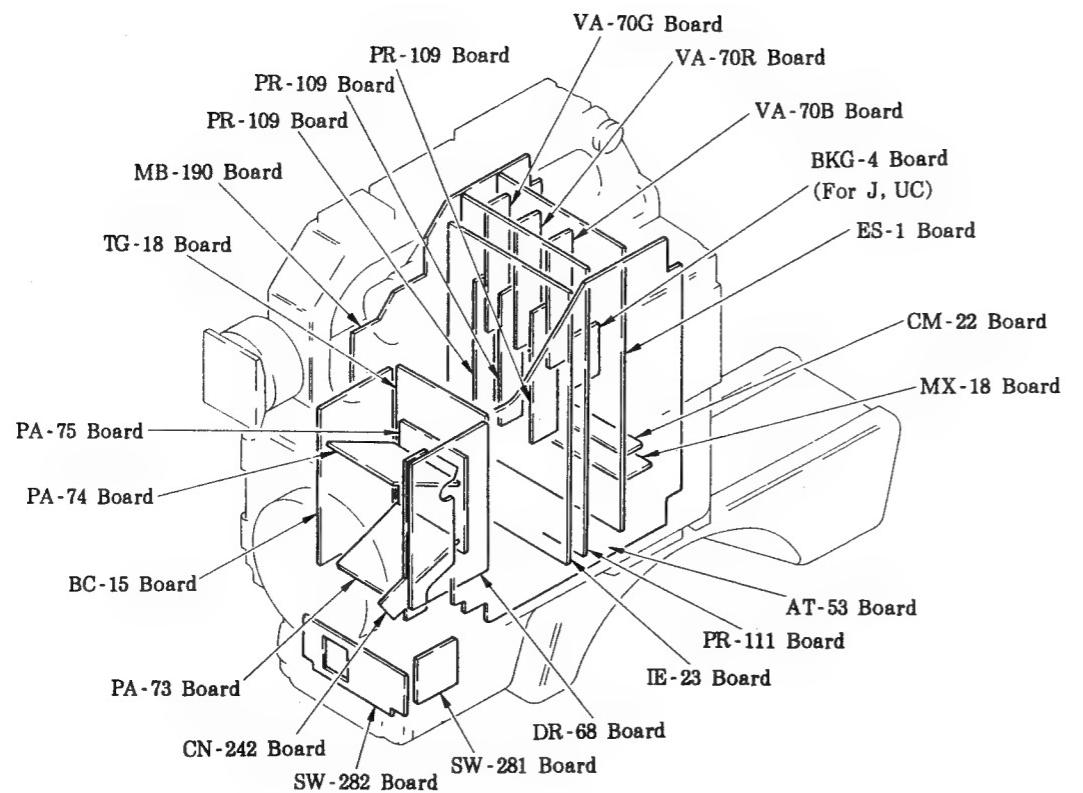
IC4-12pin



IC9-23pin



SECTION C
SCHEMATIC DIAGRAMS AND BOARD ILLUSTRATIONS



BC-15, DR-68, TG-38

BC-15, DR-68, TG-38

BC-15 BOARD

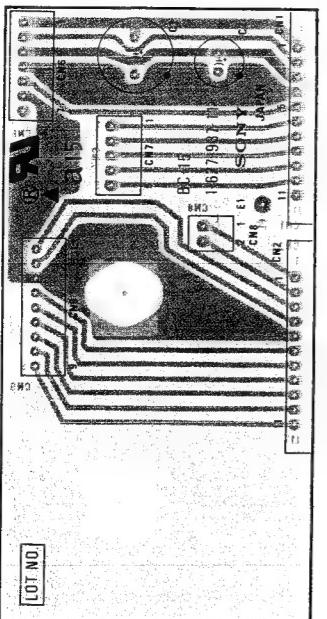
Ser. NO. 10001-11720 (UC)
30001-30840 (J)
40001-42530 (EK)

TG-38 BOARD

Ser. NO. 10001-11720 (UC)
30001-30840 (J)
40001-42530 (EK)

DR-68 BOARD

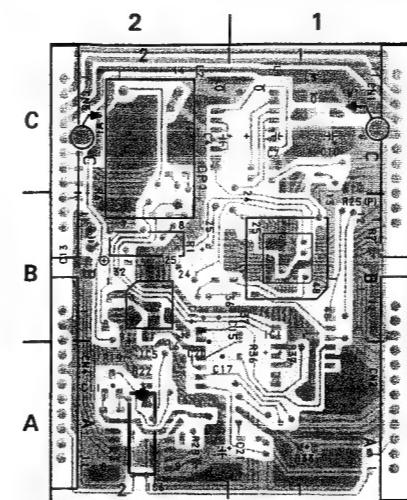
Ser. NO. 10001-11720 (UC)
30001-30840 (J)
40001-42530 (EK)



1-627-937-11 COMPONENT SIDE

TG-38 (1-627-932-11)

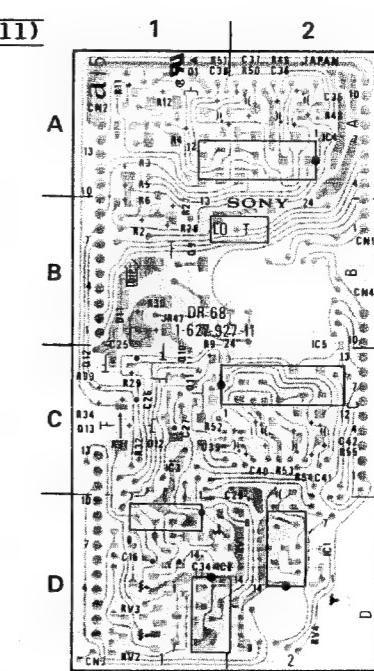
CN1 C-1
CN2 A-1
CN3 C-2
CN4 A-2
CP1 C-2
D13 B-2
IC1 B-1
IC2 C-1
IC3 A-2
IC4 A-1
IC5 B-2
IC6 A-2
Q2 A-2



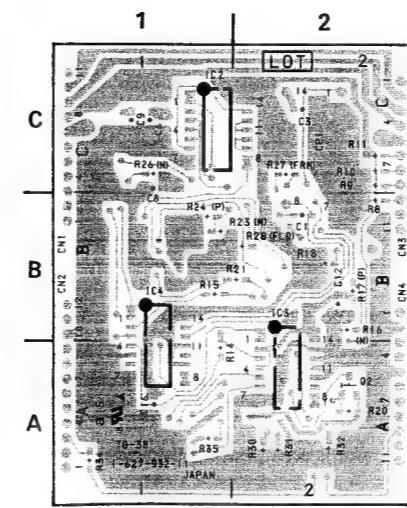
1-627-932-11 SOLDERING SIDE

DR-68 (1-627-927-11)

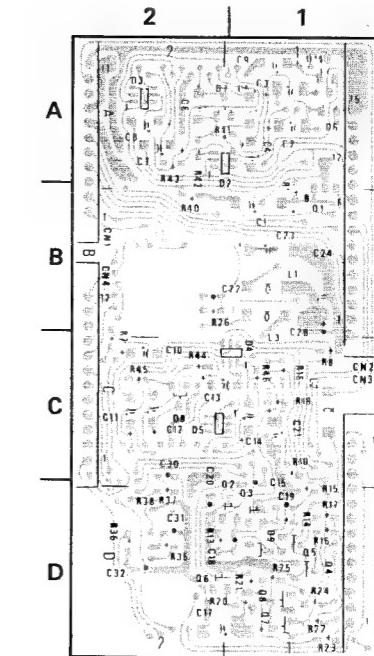
CN1 A-2
CN2 B-1
CN3 D-1
CN4 C-2
D1 A-1
D2 A-1
D3 A-2
D4 C-1
D5 C-2
D6 A-1
D7 A-2
D8 C-2
D9 D-1
D11 B-1
D12 C-1
IC1 D-2
IC2 D-1
IC3 D-1
IC4 A-2
IC5 C-2
Q1 B-1
Q2 D-1
Q3 D-1
Q4 D-1
Q5 D-1
Q6 D-2
Q7 D-1
Q8 D-1
Q9 B-1
Q10 C-1
Q11 C-1
Q12 C-1
Q13 C-1
Q14 A-1
RV1 D-1
RV2 D-1
RV3 D-1
RV4 D-2



1-627-927-11 COMPONENT SIDE



1-627-932-11 SOLDERING SIDE



1-627-927-11 SOLDERING SIDE

BC-15, DR-68, TG-38

BC-15, DR-68, TG-38

BC-15 BOARD

Ser. NO. 11721-	(UC)
30841-	(J)
42531-	(EK)

TG-38 BOARD

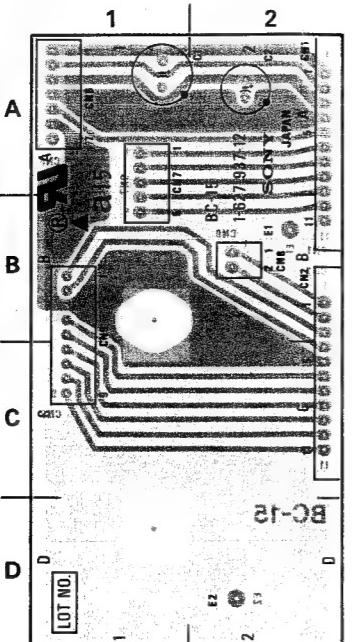
Ser. NO. 11721-	(UC)
30841-	(J)
42531-	(EK)

DR-68 BOARD

Ser. NO. 11721-	(UC)
30841-	(J)
42531-	(EK)

BC-15 (1-627-937-12)

CN1 A-2
CN2 C-2
CN6 A-1
CN7 A-1
CN8 B-2
CN9 B-1



1-627-937-12 COMPONENT SIDE

TG-38 (1-627-932-12)

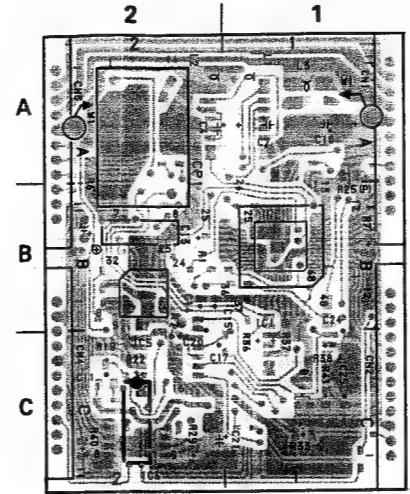
CN1 A-1
CN2 C-1
CN3 A-2
CN4 C-2

CP1 A-2

D1 C-1

IC1 B-1
IC2 A-1
IC3 C-2
IC4 C-1
IC5 B-2
IC6 C-2

Q2 C-2



1-627-932-12 COMPONENT SIDE

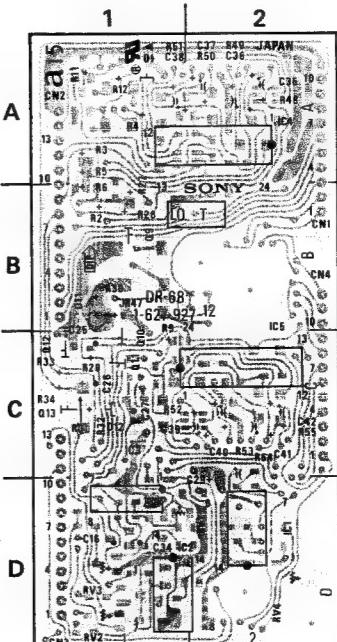
DR-68 (1-627-927-12)

CN1 A-2
CN2 B-1
CN3 D-1
CN4 C-2

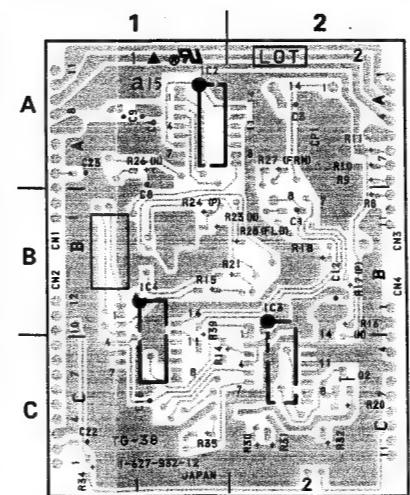
E1 B-2

D1 A-1
D2 A-1
D3 A-2
D4 C-1
D5 C-2
D6 A-1
D7 A-2
D8 C-2
D9 D-1
D11 B-1
D12 C-1

IC1 D-2
IC2 D-1
IC3 D-1
IC4 A-2
IC5 C-2



1-627-927-12 COMPONENT SIDE

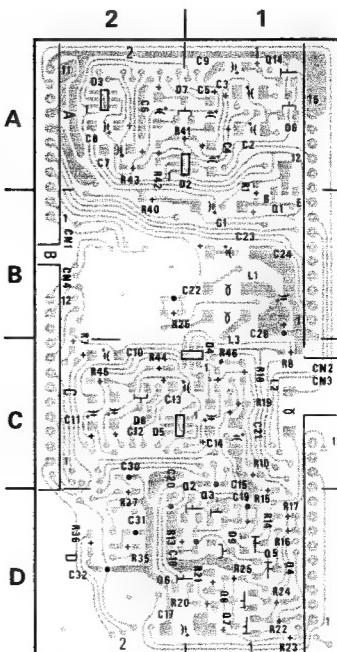


1-627-932-12 SOLDERING SIDE

Q1 B-1
Q2 D-1
Q3 D-1
Q4 D-1
Q5 D-1
Q6 D-2
Q7 D-1
Q8 D-1
Q9 B-1
Q10 C-1
Q11 C-1
Q12 C-1
Q13 C-1
Q14 A-1

RV1 D-1
RV2 D-1
RV3 D-1
RV4 D-2

TP1 C-1
TP2 D-2
TP3 D-1
TP4 C-1
TP5 C-1



1-627-927-12 SOLDERING SIDE

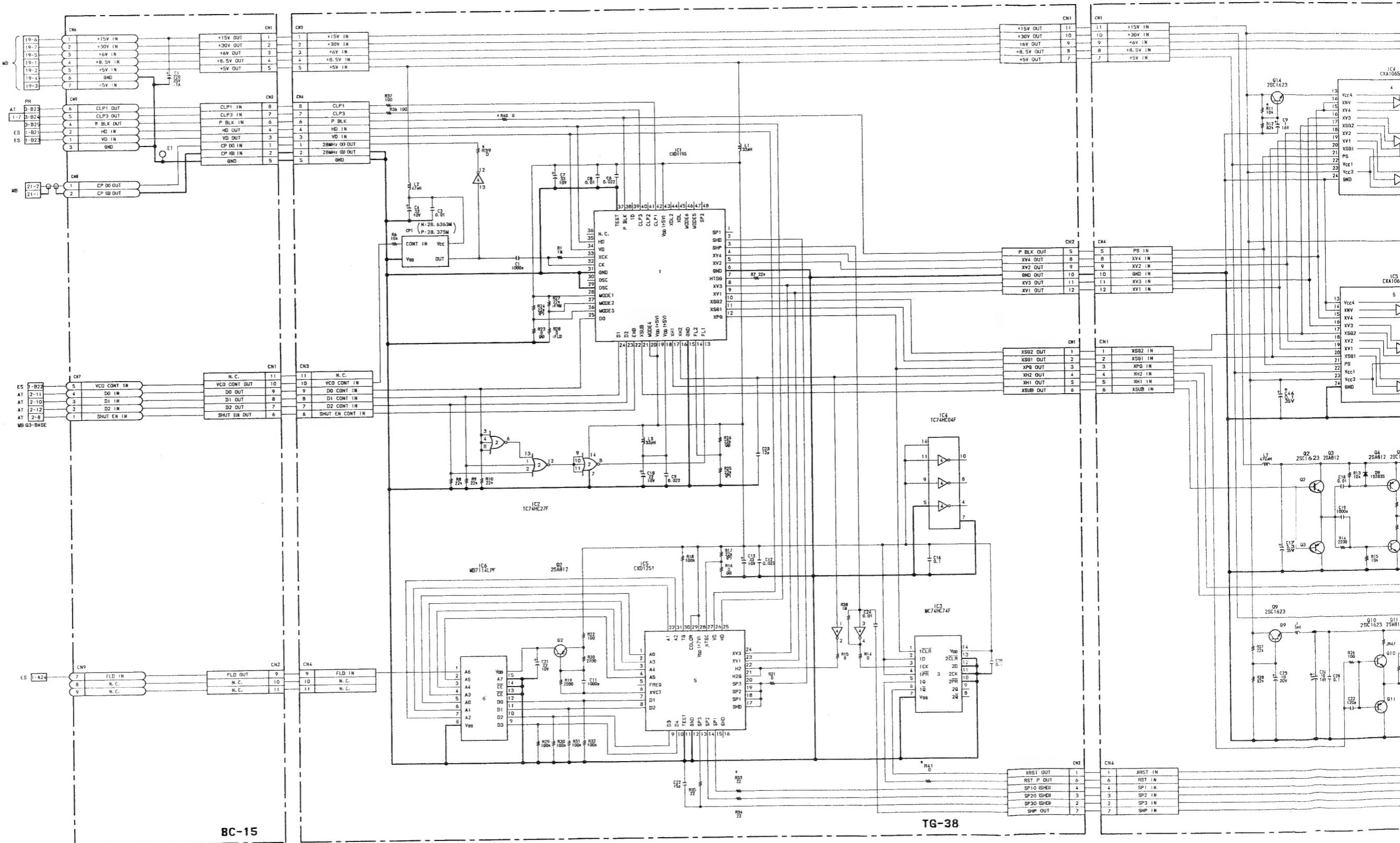
C-3 (b)

C-4 (b)

DXC-325 (J, UC)
DXC-325P (EK)

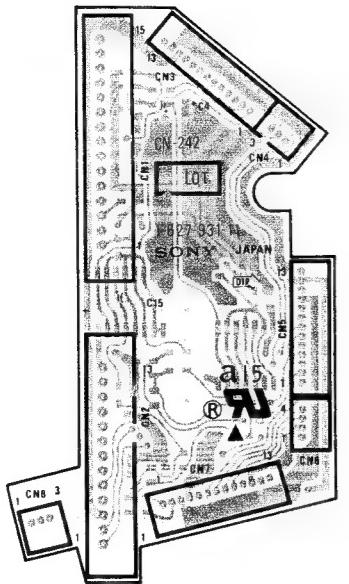
CCD BLOCK
BC-15 DR-68 TG-38

CCD BLOCK
BC-15 DR-68 TG-38



CN-242 BOARD

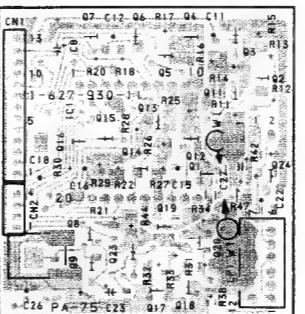
Ser. NO. 10001-11720 (UC)
30001-30840 (J)
40001-42530 (EK)



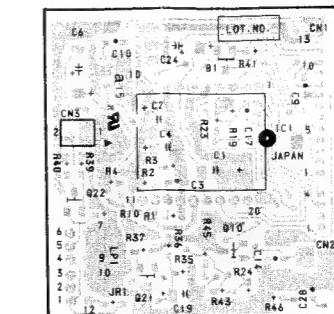
1-627-931-11 COMPONENT SIDE

PA-75 BOARD

Ser. NO. 10001-11720 (UC)
30001-30840 (J)
40001-42530 (EK)



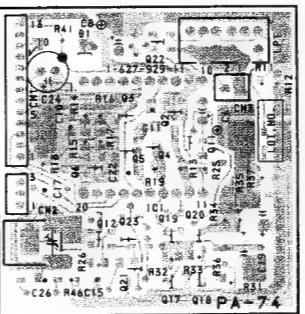
1-627-930-11 COMPONENT SIDE



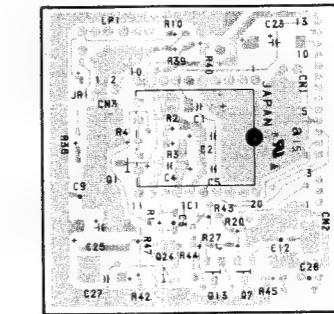
1-627-930-11 SOLDERING SIDE

PA-74 BOARD

Ser. NO. 10001-11720 (UC)
30001-30840 (J)
40001-42530 (EK)



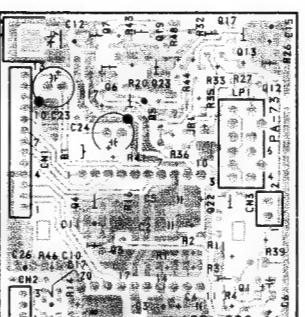
1-627-929-11 COMPONENT SIDE



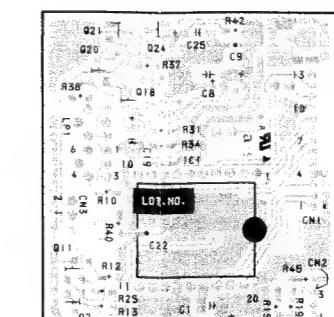
1-627-929-11 SOLDERING SIDE

PA-73 BOARD

Ser. NO. 10001-11720 (UC)
30001-30840 (J)
40001-42530 (EK)



1-627-928-11 COMPONENT SIDE



1-627-928-11 SOLDERING SIDE

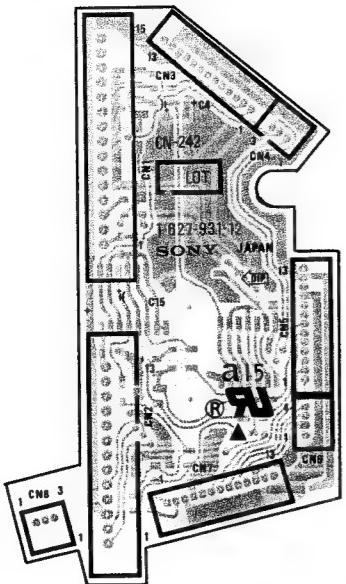
C-9 (a)

DXC-325 (J, UC)
DXC-325P (EK)

C-10 (a)

CN-242 BOARD

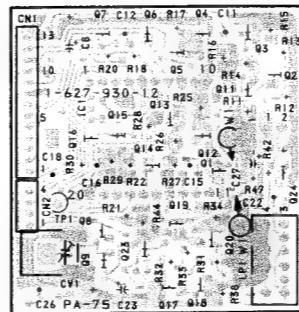
Ser. NO. 11721- (UC)
30841- (J)
42531- (EK)



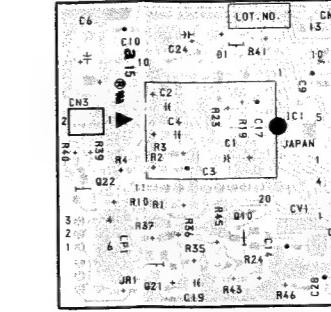
1-627-931-12 COMPONENT SIDE

PA-75 BOARD

Ser. NO. 11721- (UC)
30841- (J)
42531- (EK)



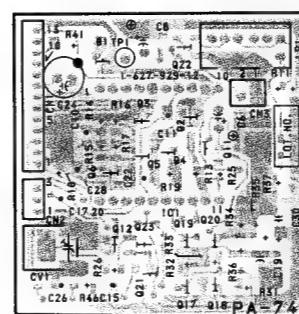
1-627-930-12 COMPONENT SIDE



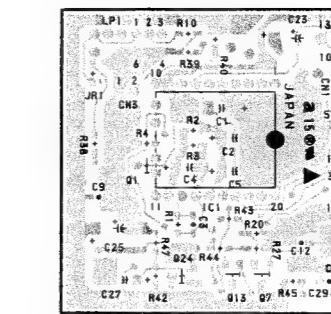
1-627-930-12 SOLDERING SIDE

PA-74 BOARD

Ser. NO. 11721- (UC)
30841- (J)
42531- (EK)



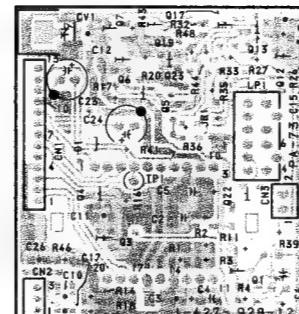
1-627-929-12 COMPONENT SIDE



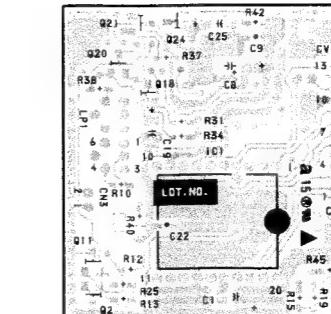
1-627-929-12 SOLDERING SIDE

PA-73 BOARD

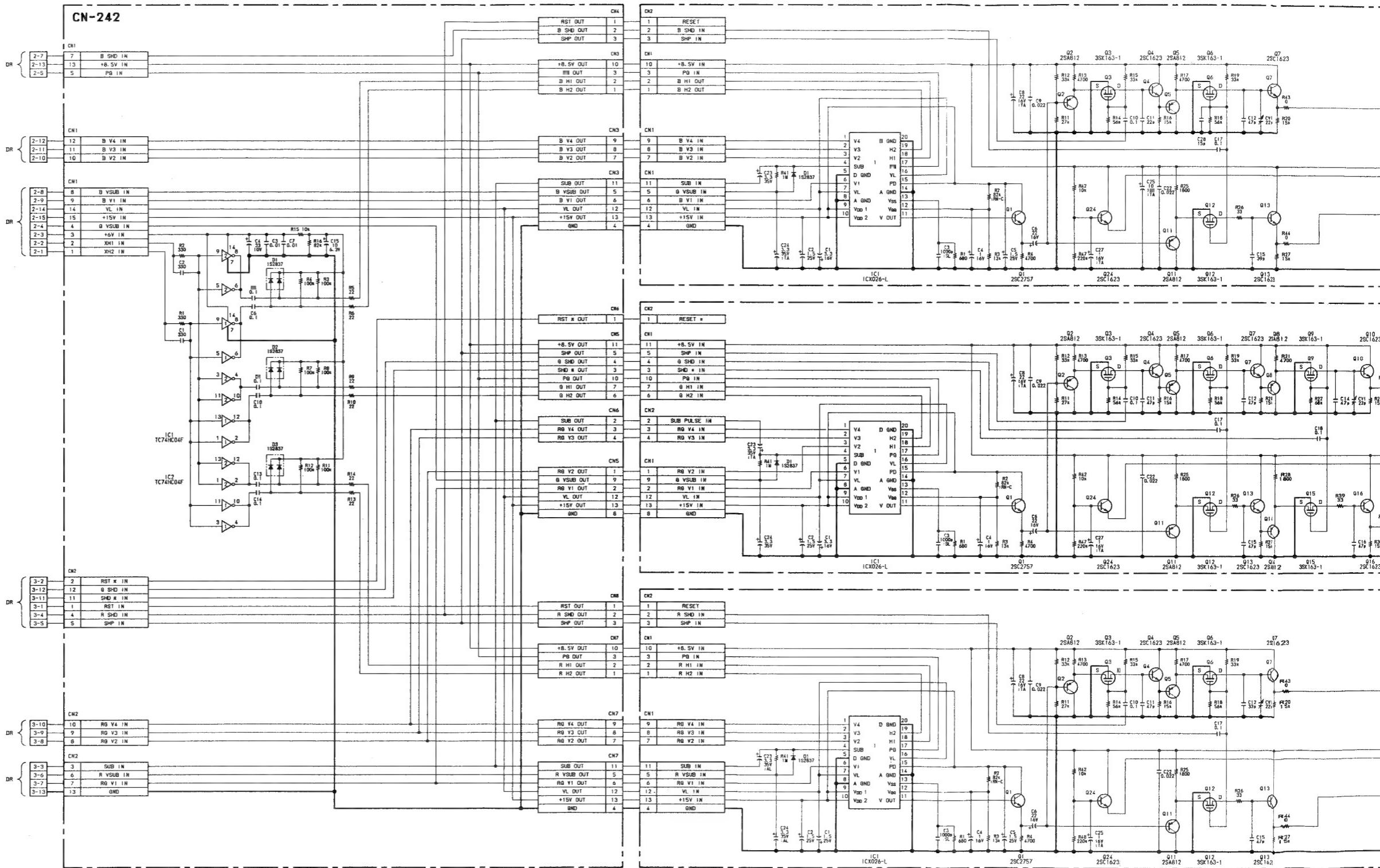
Ser. NO. 11721- (UC)
30841- (J)
42531- (EK)

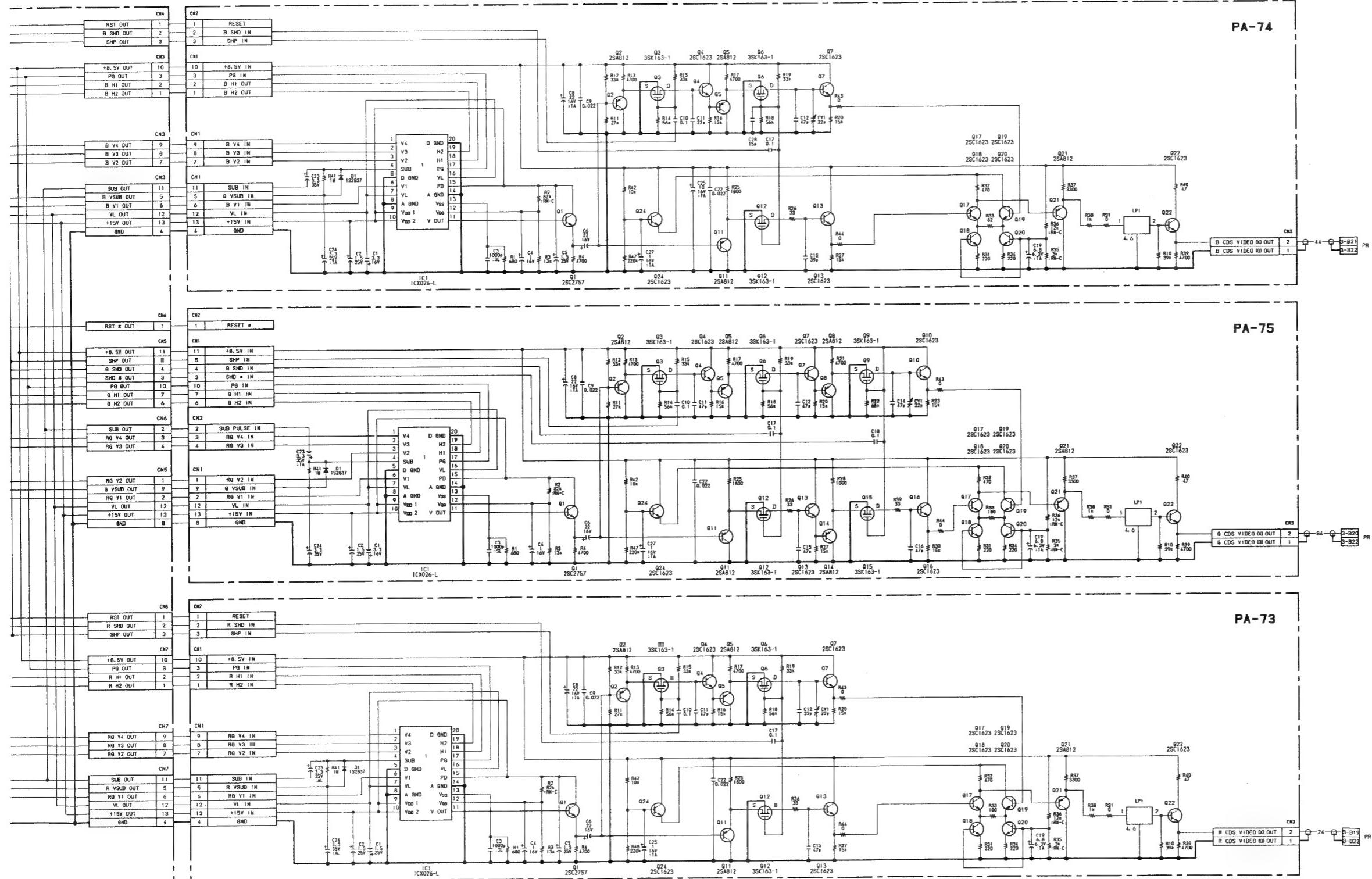


1-627-928-12 COMPONENT SIDE



1-627-928-12 SOLDERING SIDE





Ser.No.10001-11270 (UC)
30001-30810 (J)
40001-42080 (EK)

IE-23

IE-23

IE-23 (1-627-933-11,12)

CN1 E-1
CN2 A-1

D1 C-2
D2 A-3

E1 C-4

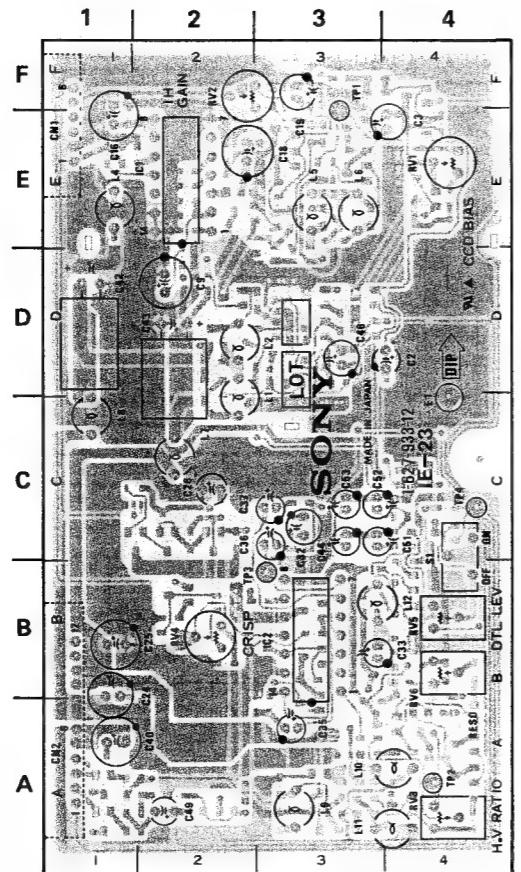
IC1 E-2
IC2 B-3
IC3 C-1

Q1 A-1
Q3 E-4
Q4 E-4
Q5 D-3
Q6 D-3
Q7 D-3
Q8 D-3
Q9 D-3
Q10 E-2
Q12 E-3
Q13 A-1
Q14 A-4
Q15 A-3
Q16 A-3
Q17 A-4
Q18 B-4
Q19 B-4
Q20 B-3
Q21 B-2
Q22 B-3
Q23 B-3
Q24 C-4
Q25 C-1
Q27 C-2
Q28 F-4
Q29 D-3
Q30 D-3
Q31 D-2
Q32 E-3
Q33 E-3
Q34 E-3
Q35 D-3
Q36 E-3
Q37 A-2
Q38 A-2
Q39 A-4
Q40 A-4
Q41 A-4
Q42 A-4
Q43 D-3
Q44 C-4

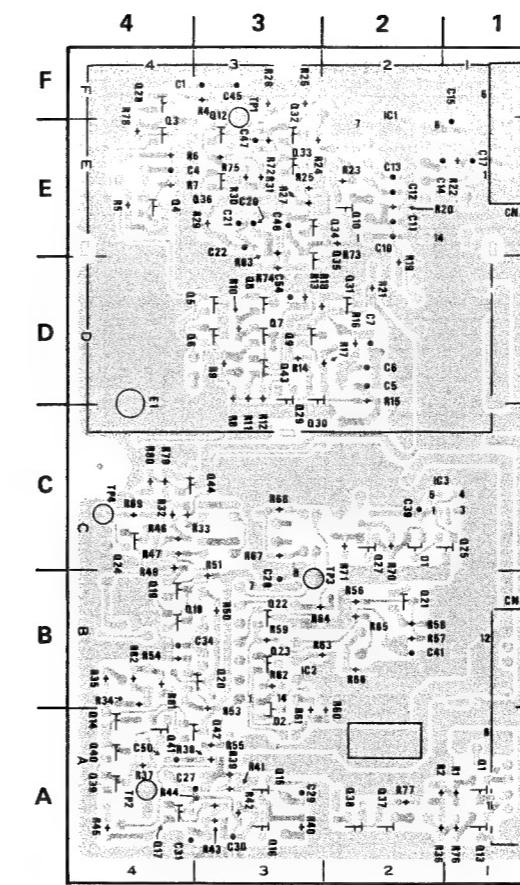
RV1 E-4
RV2 F-2
RV3 A-4
RV4 B-2
RV5 B-4
RV6 B-4

S1 C-4

TP1 E-3
TP2 A-4
TP3 B-3
TP4 C-4



1-627-933-11 COMPONENT SIDE



1-627-933-11 SOLDERING SIDE

IE-23 (1-627-933-11,12)

CN1 E-1
CN2 A-1

D1 C-2
D2 A-3

E1 C-4

IC1 E-2
IC2 B-3
IC3 C-1

Q1 A-1
Q3 E-4
Q4 E-4
Q5 D-3
Q6 D-3
Q7 D-3
Q8 D-3
Q9 D-3
Q10 E-2
Q12 E-3
Q13 A-1
Q14 A-4
Q15 A-3
Q16 A-3
Q17 A-4
Q18 B-4
Q19 B-4
Q20 B-3
Q21 B-2
Q22 B-3
Q23 B-3
Q24 C-4
Q25 C-1
Q27 C-2
Q28 F-4
Q29 D-3
Q30 D-3
Q31 D-2
Q32 E-3
Q33 E-3
Q34 E-3
Q35 D-3
Q36 E-3
Q37 A-2
Q38 A-2
Q39 A-4
Q40 A-4
Q41 A-4
Q42 A-4
Q43 D-3
Q44 C-4

RV1 E-4
RV2 F-2
RV3 A-4
RV4 B-2
RV5 B-4
RV6 B-4

S1 C-4

TP1 E-3
TP2 A-4
TP3 B-3
TP4 C-4

C-15 (a)

C-16 (a)

DXC-325 (J, UC)
DXC-325P (EK)

Ser. No. 11271-	(UC)
30811-	(J)
42081-	(EK)

IE-23 (1-627-933-11,12)

CN1 E-1
CN2 A-1

D1 C-2
D2 A-3

E1 C-4

IC1 E-2
IC2 B-3
IC3 C-1

Q1 A-1

Q3 E-4

Q4 E-4

Q5 D-3

Q6 D-3

Q7 D-3

Q8 D-3

Q9 D-3

Q10 E-2

Q12 E-3

Q13 A-1

Q14 A-4

Q15 A-3

Q16 A-3

Q17 A-4

Q18 B-4

Q19 B-4

Q20 B-3

Q21 B-2

Q22 B-3

Q23 B-3

Q24 C-4

Q25 C-1

Q27 C-2

Q28 F-4

Q29 D-3

Q30 D-3

Q31 D-2

Q32 E-3

Q33 E-3

Q34 E-3

Q35 D-3

Q36 E-3

Q37 A-2

Q38 A-2

Q39 A-4

Q40 A-4

Q41 A-4

Q42 A-4

Q43 D-3

Q44 C-4

RV1 E-4

RV2 F-2

RV3 A-4

RV4 B-2

RV5 B-4

RV6 B-4

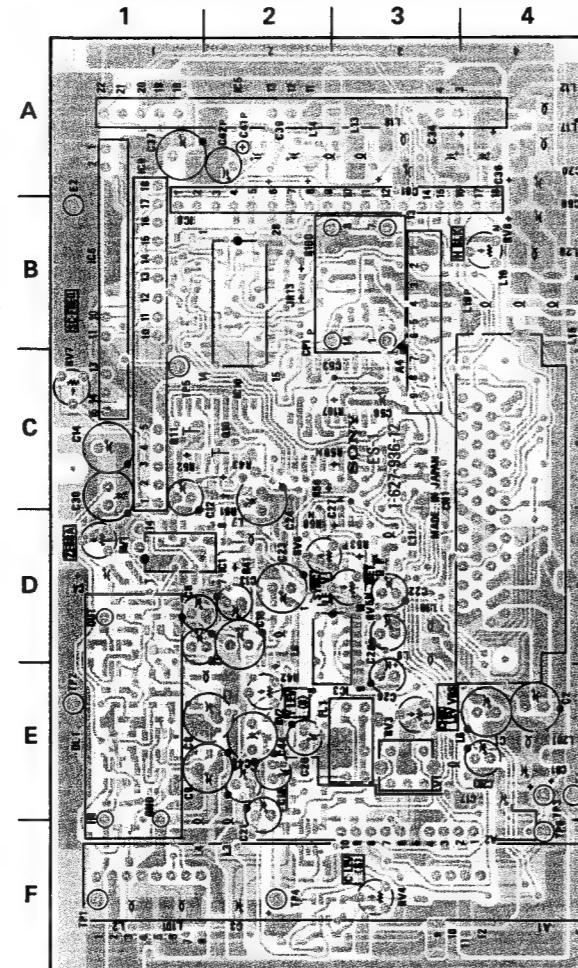
S1 C-4

TP1 E-3

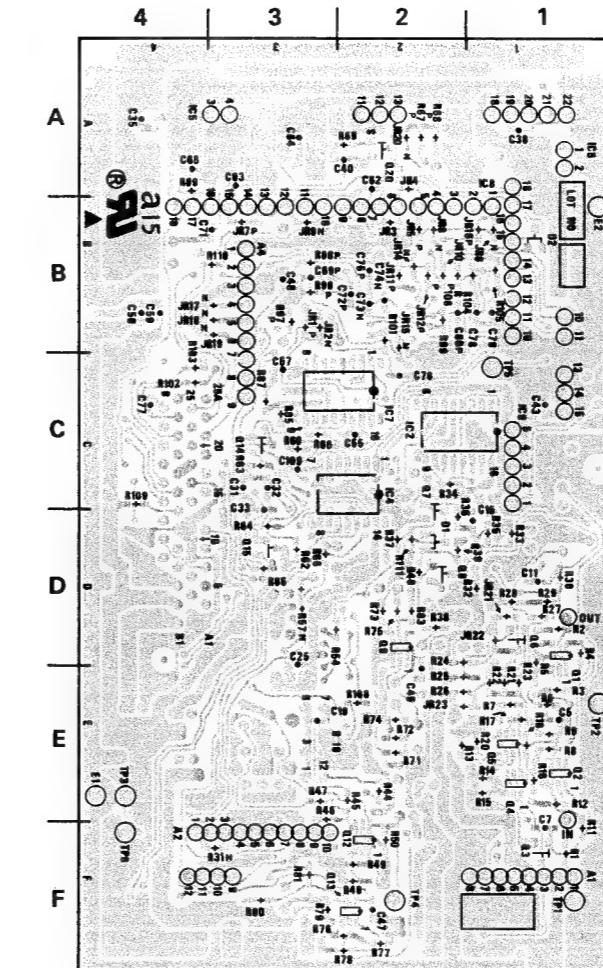
TP2 A-4

TP3 B-3

TP4 C-4



1-627-936-12 COMPONENT SIDE



1-627-936-12 SOLDERING SIDE

IE-23 (1-627-933-11,12)

CN1 E-1
CN2 A-1

D1 C-2
D2 A-3

E1 C-4

IC1 E-2
IC2 B-3
IC3 C-1

Q1 A-1

Q3 E-4

Q4 E-4

Q5 D-3

Q6 D-3

Q7 D-3

Q8 D-3

Q9 D-3

Q10 E-2

Q12 E-3

Q13 A-1

Q14 A-4

Q15 A-3

Q16 A-3

Q17 A-4

Q18 B-4

Q19 B-4

Q20 B-3

Q21 B-2

Q22 B-3

Q23 B-3

Q24 C-4

Q25 C-1

Q27 C-2

Q28 F-4

Q29 D-3

Q30 D-3

Q31 D-2

Q32 E-3

Q33 E-3

Q34 E-3

Q35 D-3

Q36 E-3

Q37 A-2

Q38 A-2

Q39 A-4

Q40 A-4

Q41 A-4

Q42 A-4

Q43 D-3

Q44 C-4

RV1 E-4

RV2 F-2

RV3 A-4

RV4 B-2

RV5 B-4

RV6 B-4

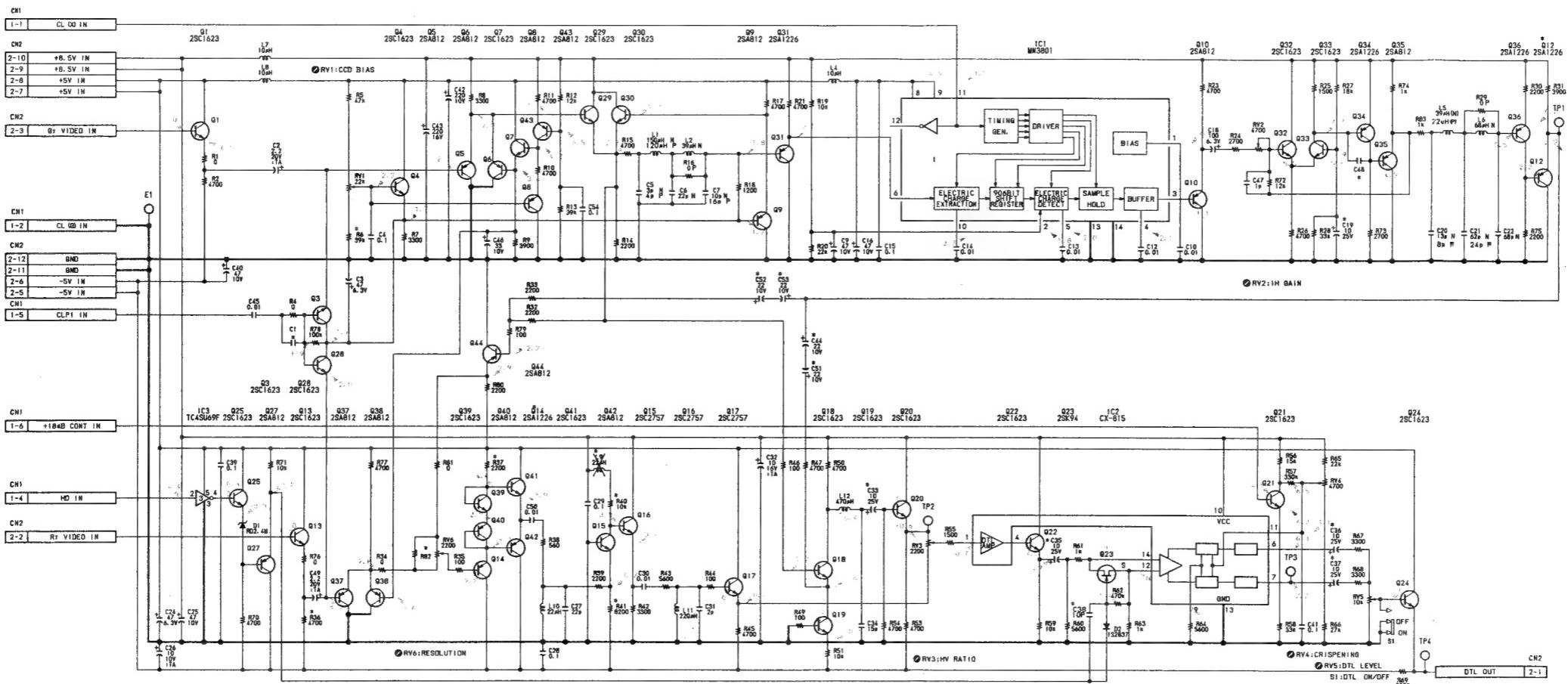
S1 C-4

TP1 E-3

TP2 A-4

TP3 B-3

TP4 C-4



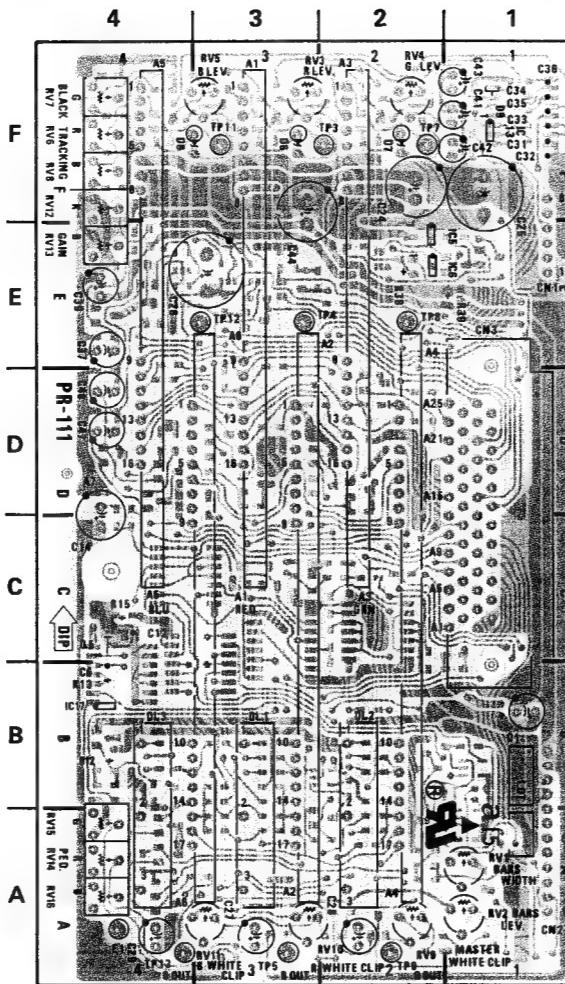
IE-23 BOARD

PR-111 BOARD

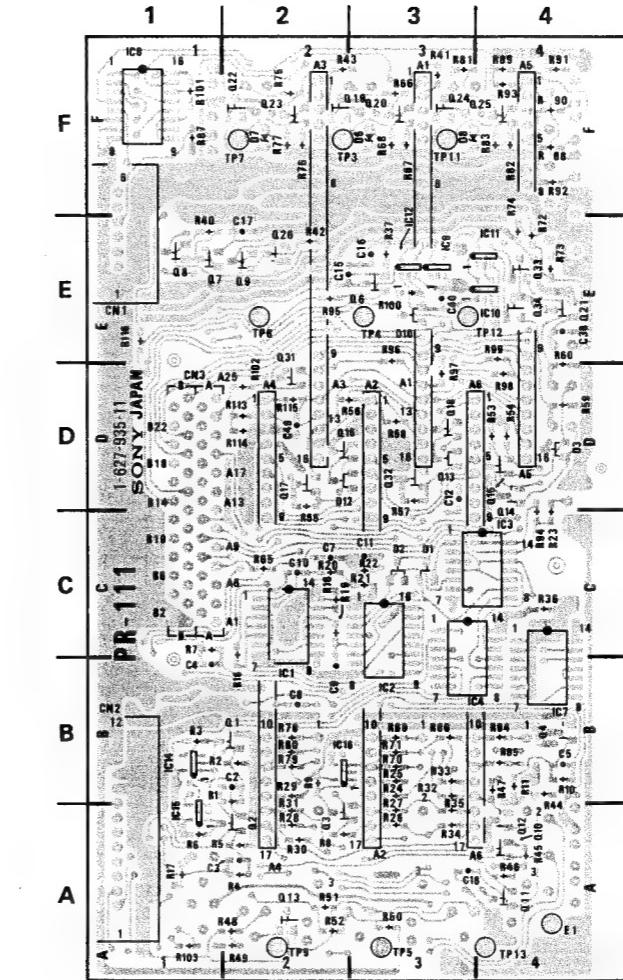
Ser. No. 10001-11270 (UC)
 30001-30810 (J)
 40001-42080 (EK)

PR-111 (1-627-935-11,12)

CN1	E-1	Q16	D-2
CN2	A-1	Q17	D-2
CN3	D-1	Q18	D-3
		Q19	F-2
D1	C-3	Q20	F-3
D2	C-3	Q21	E-4
D3	D-4	Q22	F-2
D6	F-3	Q23	F-2
D7	F-2	Q24	F-3
D8	F-3	Q25	F-4
D9	F-1	Q26	E-2
D10	E-3	Q31	D-2
D12	D-2	Q32	D-3
D13	D-3	Q33	E-4
DL1	A-3	Q34	E-4
DL2	A-2		
DL3	A-4	RV1	A-1
		RV2	A-1
		RV3	F-3
E1	A-4	RV4	F-2
		RV5	F-3
IC1	C-2	RV6	F-4
IC2	C-3	RV7	F-4
IC3	C-4	RV8	F-4
IC4	B-3	RV9	A-2
IC5	E-2	RV10	A-3
IC6	E-2	RV11	A-3
IC7	B-4	RV12	F-4
IC8	F-1	RV13	E-4
IC9	E-3	RV14	A-4
IC10	E-4	RV15	A-4
IC11	E-4	RV16	A-4
IC12	E-3		
IC13	F-1	TP3	F-2
IC14	B-1	TP4	E-3
IC15	A-1	TP5	A-3
IC16	B-2	TP7	F-2
IC17	B-4	TP8	E-2
		TP9	A-2
Q1	B-2	TP11	F-3
Q2	A-2	TP12	E-3
Q3	A-2	TP13	A-4
Q4	B-4		
Q5	C-4		
Q6	E-3		
Q7	E-1		
Q8	E-1		
Q9	E-2		
Q10	A-4		
Q11	A-4		
Q12	A-4		
Q13	A-2		
Q14	D-4		
Q15	D-4		



1-627-935-11 COMPONENT SIDE



1-627-935-11 SOLDERING SIDE

PR-111 (1-627-935-11,12)

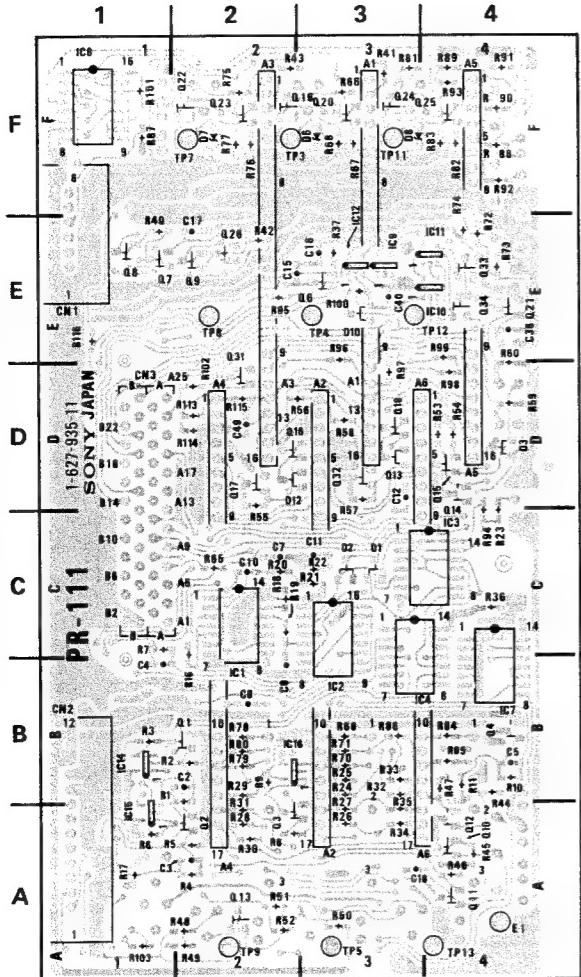
CN1	E-1	Q16	D-2
CN2	A-1	Q17	D-2
CN3	D-1	Q18	D-3
		Q19	F-2
D1	C-3	Q20	F-3
D2	C-3	Q21	E-4
D3	D-4	Q22	F-2
D6	F-3	Q23	F-2
D7	F-2	Q24	F-3
D8	F-3	Q25	F-4
D9	F-1	Q26	E-2
D10	E-3	Q31	D-2
D12	D-2	Q32	D-3
D13	D-3	Q33	E-4
DL1	A-3	Q34	E-4
DL2	A-2		
DL3	A-4	RV1	A-1
		RV2	A-1
		RV3	F-3
E1	A-4	RV4	F-2
		RV5	F-3
IC1	C-2	RV6	F-4
IC2	C-3	RV7	F-4
IC3	C-4	RV8	F-4
IC4	B-3	RV9	A-2
IC5	E-2	RV10	A-3
IC6	E-2	RV11	A-3
IC7	B-4	RV12	F-4
IC8	F-1	RV13	E-4
IC9	E-3	RV14	A-4
IC10	E-4	RV15	A-4
IC11	E-4	RV16	A-4
IC12	E-3		
IC13	F-1	TP3	F-2
IC14	B-1	TP4	E-3
IC15	A-1	TP5	A-3
IC16	B-2	TP7	F-2
IC17	B-4	TP8	E-2
		TP9	A-2
Q1	B-2	TP11	F-3
Q2	A-2	TP12	E-3
Q3	A-2	TP13	A-4
Q4	B-4		
Q5	C-4		
Q6	E-3		
Q7	E-1		
Q8	E-1		
Q9	E-2		
Q10	A-4		
Q11	A-4		
Q12	A-4		
Q13	A-2		
Q14	D-4		
Q15	D-4		

C-20 (a)

C-21 (a)

VA-70 BOARD

Ser. No. 10001-11270 (UC)
 30001-30810 (J)
 40001-42080 (EK)

PR-111 (1-627-935-11,12)

1-627-935-11 SOLDERING SIDE

CN1	E-1	Q16	D-2
CN2	A-1	Q17	D-2
CN3	D-1	Q18	D-3
		Q19	F-2
D1	C-3	Q20	F-3
D2	C-3	Q21	E-4
D3	D-4	Q22	F-2
D6	F-3	Q23	F-2
D7	F-2	Q24	F-3
D8	F-3	Q25	F-4
D9	F-1	Q26	E-2
D10	E-3	Q31	D-2
D12	D-2	Q32	D-3
D13	D-3	Q33	E-4
DL1	A-3	Q34	E-4
DL2	A-2		
DL3	A-4	RV1	A-1
		RV2	A-1
		RV3	F-3
E1	A-4	RV4	F-2
		RV5	F-3
IC1	C-2	RV6	F-4
IC2	C-3	RV7	F-4
IC3	C-4	RV8	F-4
IC4	B-3	RV9	A-2
IC5	E-2	RV10	A-3
IC6	E-2	RV11	A-3
IC7	B-4	RV12	F-4
IC8	F-1	RV13	E-4
IC9	E-3	RV14	A-4
IC10	E-4	RV15	A-4
IC11	E-4	RV16	A-4
IC12	E-3		
IC13	F-1	TP3	F-2
IC14	B-1	TP4	E-3
IC15	A-1	TP5	A-3
IC16	B-2	TP7	F-2
IC17	B-4	TP8	E-2
		TP9	A-2
Q1	B-2	TP11	F-3
Q2	A-2	TP12	E-3
Q3	A-2	TP13	A-4
Q4	B-4		
Q5	C-4		
Q6	E-3		
Q7	E-1		
Q8	E-1		
Q9	E-2		
Q10	A-4		
Q11	A-4		
Q12	A-4		
Q13	A-2		
Q14	D-4		
Q15	D-4		



1-627-925-11 COMPONENT SIDE



1-627-925-11 SOLDERING SIDE

PR-109 BOARD

Ser. No. 10001-11270 (UC)
 30001-30810 (J)
 40001-42080 (EK)



1-627-926-11 COMPONENT SIDE



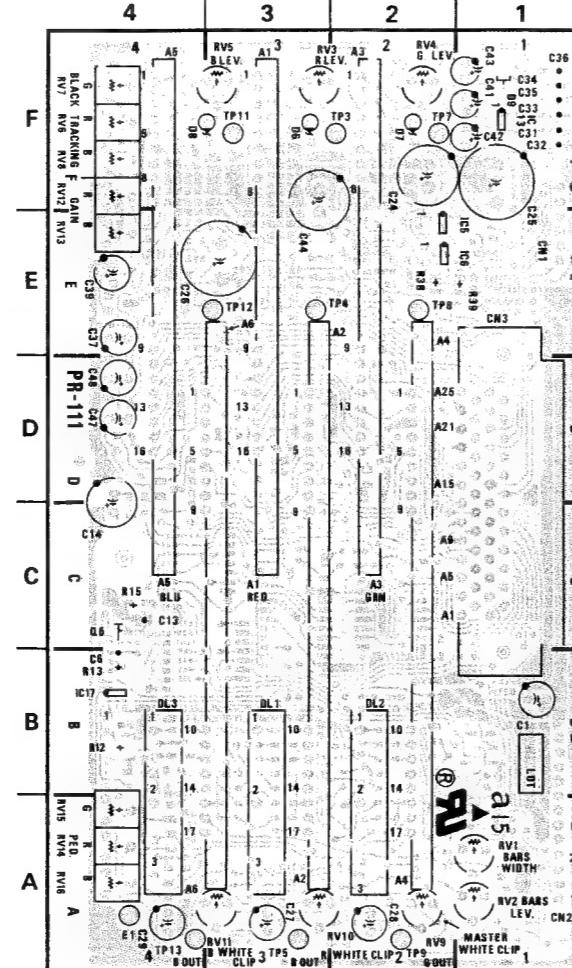
1-627-926-11 SOLDERING SIDE

PR-111 BOARD

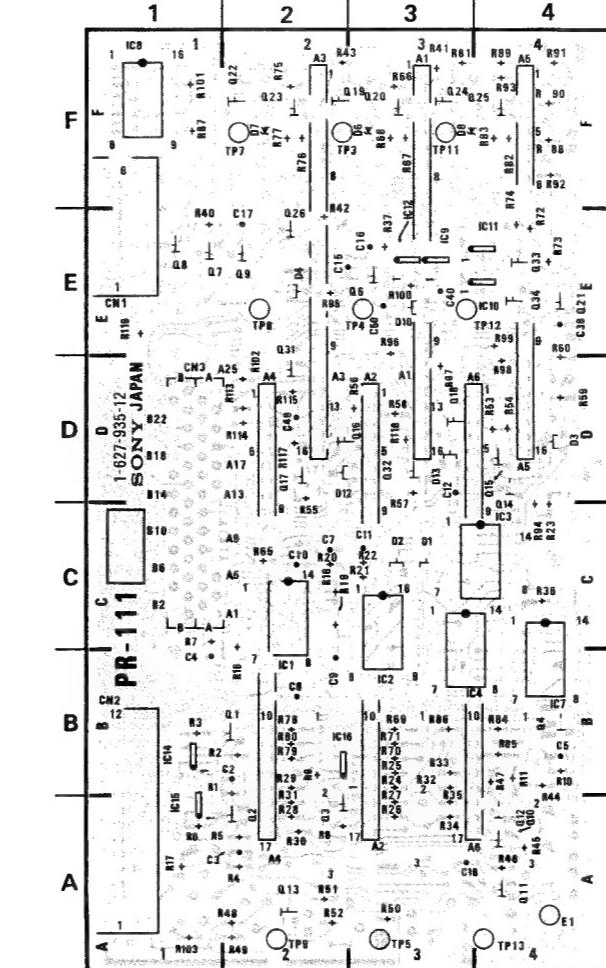
Ser. No. 11271-
30811-
42081-
(UC)
(J)
(EK)

PR-111 (1-627-935-11,12)

CN1	E-1	Q16	D-2
CN2	A-1	Q17	D-2
CN3	D-1	Q18	D-3
		Q19	F-2
D1	C-3	Q20	F-3
D2	C-3	Q21	E-4
D3	D-4	Q22	F-2
D6	F-3	Q23	F-2
D7	F-2	Q24	F-3
D8	F-3	Q25	F-4
D9	F-1	Q26	E-2
D10	E-3	Q31	D-2
D12	D-2	Q32	D-3
D13	D-3	Q33	E-4
DL1	A-3	Q34	E-4
DL2	A-2		
DL3	A-4	RV1	A-1
		RV2	A-1
		RV3	F-3
E1	A-4	RV4	F-2
		RV5	F-3
IC1	C-2	RV6	F-4
IC2	C-3	RV7	F-4
IC3	C-4	RV8	F-4
IC4	B-3	RV9	A-2
IC5	E-2	RV10	A-3
IC6	E-2	RV11	A-3
IC7	B-4	RV12	F-4
IC8	F-1	RV13	E-4
IC9	E-3	RV14	A-4
IC10	E-4	RV15	A-4
IC11	E-4	RV16	A-4
IC12	E-3		
IC13	F-1	TP3	F-2
IC14	B-1	TP4	E-3
IC15	A-1	TP5	A-3
IC16	B-2	TP7	F-2
IC17	B-4	TP8	E-2
		TP9	A-2
Q1	B-2	TP11	F-3
Q2	A-2	TP12	E-3
Q3	A-2	TP13	A-4
Q4	B-4		
Q5	C-4		
Q6	E-3		
Q7	E-1		
Q8	E-1		
Q9	E-2		
Q10	A-4		
Q11	A-4		
Q12	A-4		
Q13	A-2		
Q14	D-4		
Q15	D-4		



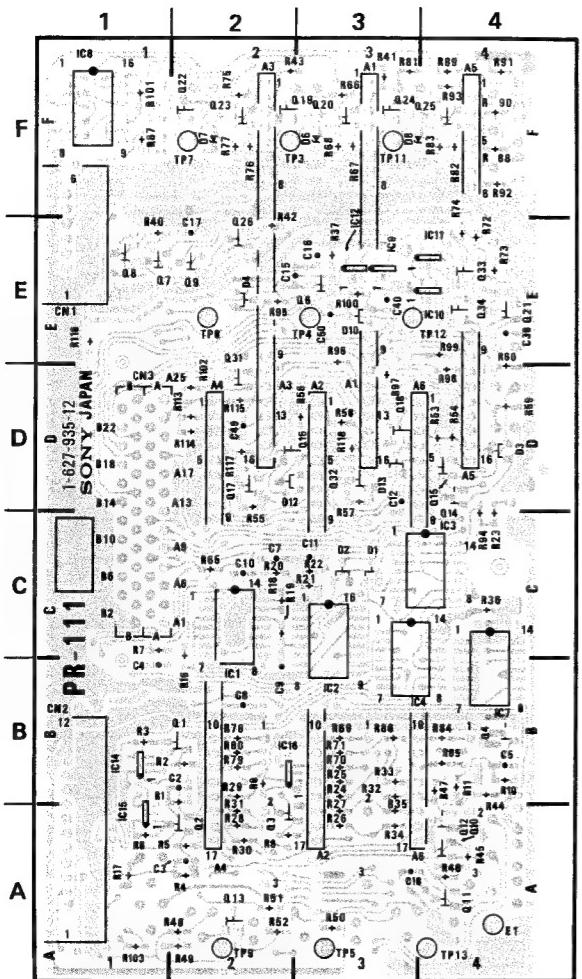
1-627-935-12 COMPONENT SIDE



VA-70 BOARD

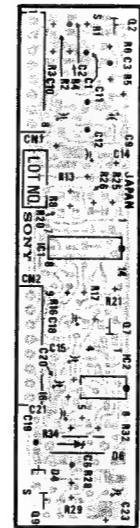
Ser. NO. 11271-12090 (UC)
 30811-30980 (J)
 42081-42850 (EK)

PR-111 (1-627-935-11,12)

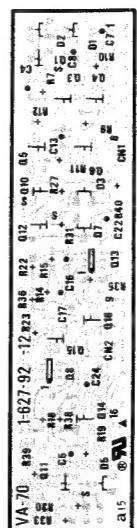


1-627-935-12 SOLDERING SIDE

CN1	E-1	Q16	D-2
CN2	A-1	Q17	D-2
CN3	D-1	Q18	D-3
		Q19	F-2
D1	C-3	Q20	F-3
D2	C-3	Q21	E-4
D3	D-4	Q22	F-2
D6	F-3	Q23	F-2
D7	F-2	Q24	F-3
D8	F-3	Q25	F-4
D9	F-1	Q26	E-2
D10	E-3	Q31	D-2
D12	D-2	Q32	D-3
D13	D-3	Q33	E-4
DL1	A-3	Q34	E-4
DL2	A-2		
DL3	A-4	RV1	A-1
		RV2	A-1
		RV3	F-3
E1	A-4	RV4	F-2
		RV5	F-3
IC1	C-2	RV6	F-4
IC2	C-3	RV7	F-4
IC3	C-4	RV8	F-4
IC4	B-3	RV9	A-2
IC5	E-2	RV10	A-3
IC6	E-2	RV11	A-3
IC7	B-4	RV12	F-4
IC8	F-1	RV13	E-4
IC9	E-3	RV14	A-4
IC10	E-4	RV15	A-4
IC11	E-4	RV16	A-4
IC12	E-3		
IC13	F-1	TP3	F-2
IC14	B-1	TP4	E-3
IC15	A-1	TP5	A-3
IC16	B-2	TP7	F-2
IC17	B-4	TP8	E-2
		TP9	A-2
Q1	B-2	TP11	F-3
Q2	A-2	TP12	E-3
Q3	A-2	TP13	A-4
Q4	B-4		
Q5	C-4		
Q6	E-3		
Q7	E-1		
Q8	E-1		
Q9	E-2		
Q10	A-4		
Q11	A-4		
Q12	A-4		
Q13	A-2		
Q14	D-4		
Q15	D-4		



1-627-925-12 COMPONENT SIDE



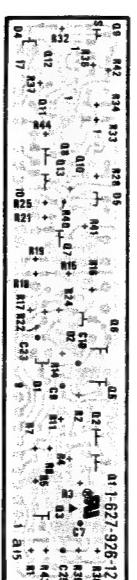
1-627-925-12 SOLDERING SIDE

PR-109 BOARD

Ser. No. 11271-
 30811-
 42081-
 (UC)
 (J)
 (EK)



1-627-926-12 COMPONENT SIDE



1-627-926-12 SOLDERING SIDE

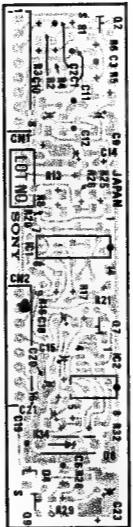
PR-109, PR-111, VA-70

PR-109, PR-111, VA-70

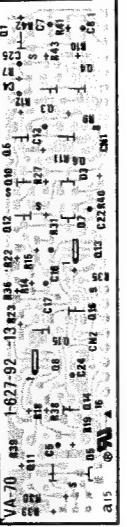
VA-70 BOARD

Ser. NO. 12091-
30981-
42851-

(UC)
(J)
(EK)



1-627-925-13 COMPONENT SIDE



1-627-925-13 SOLDERING SIDE

C-21 (c)

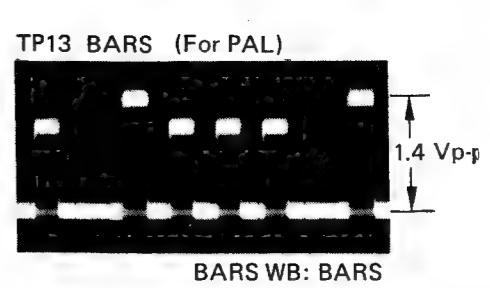
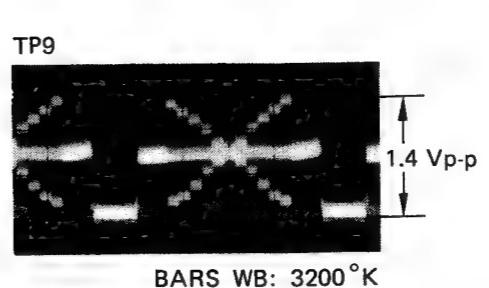
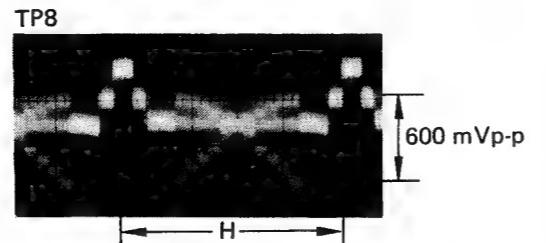
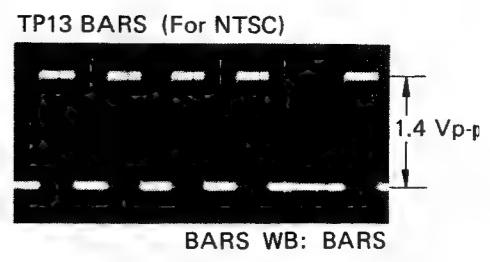
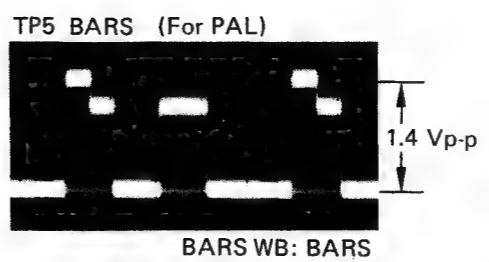
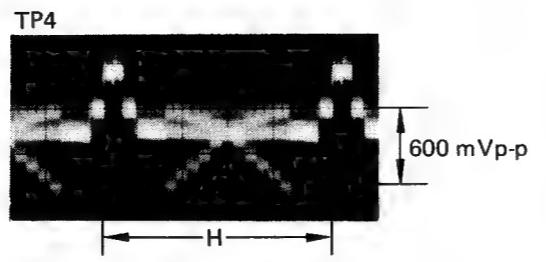
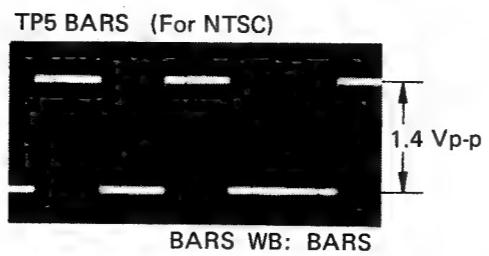
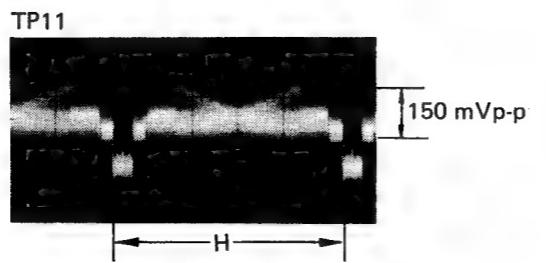
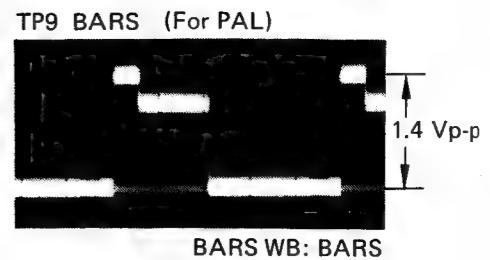
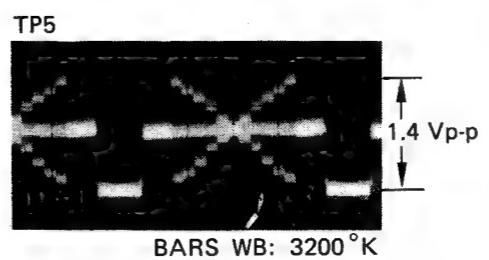
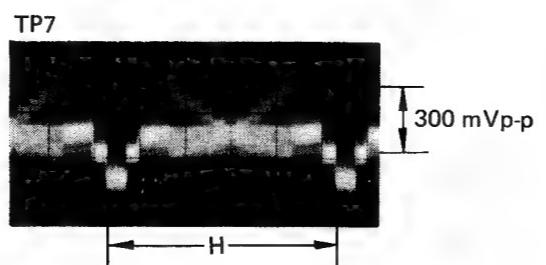
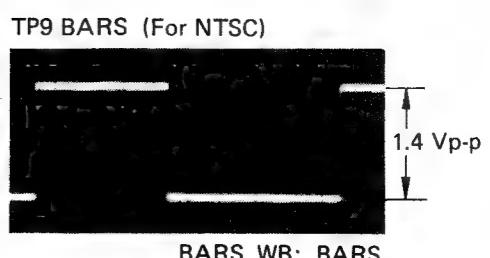
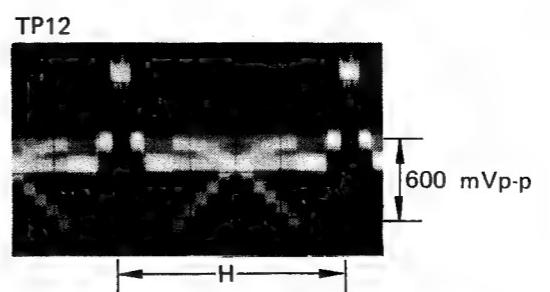
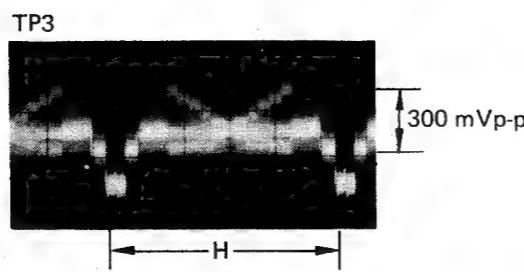
C-22 (c)

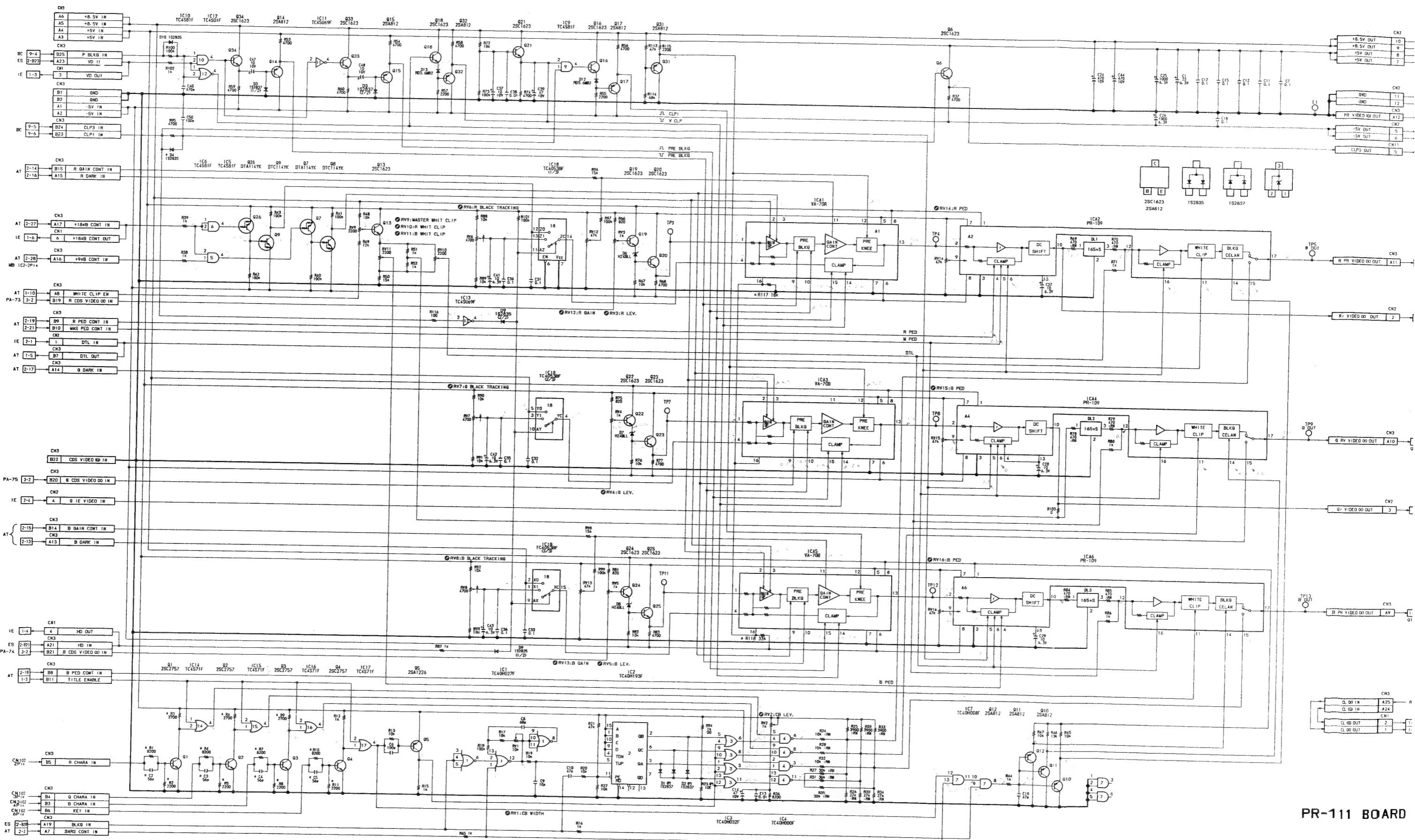
DXC-325 (J, UC)
DXC-325P (EK)

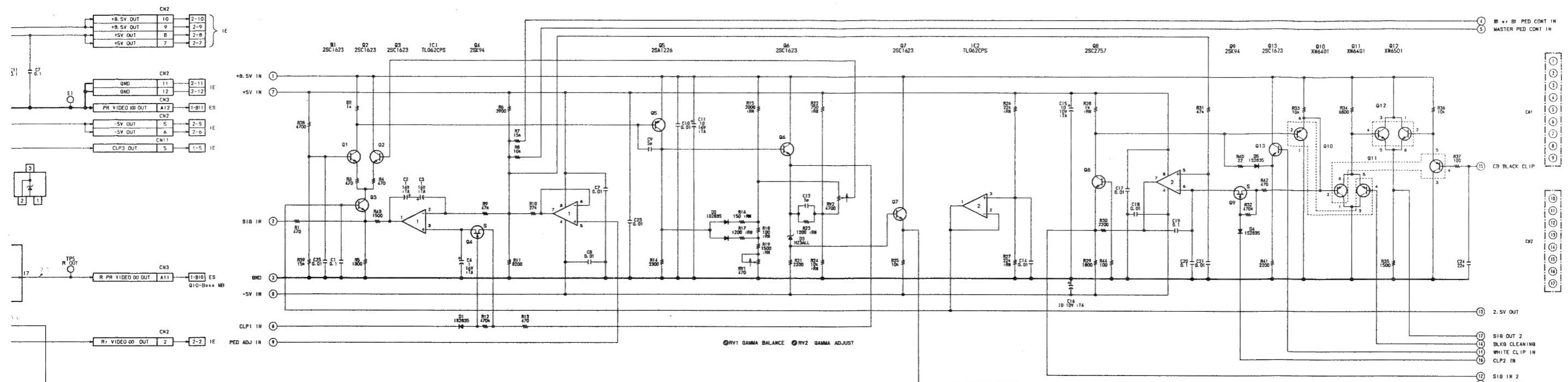
PR-111

NOTE:

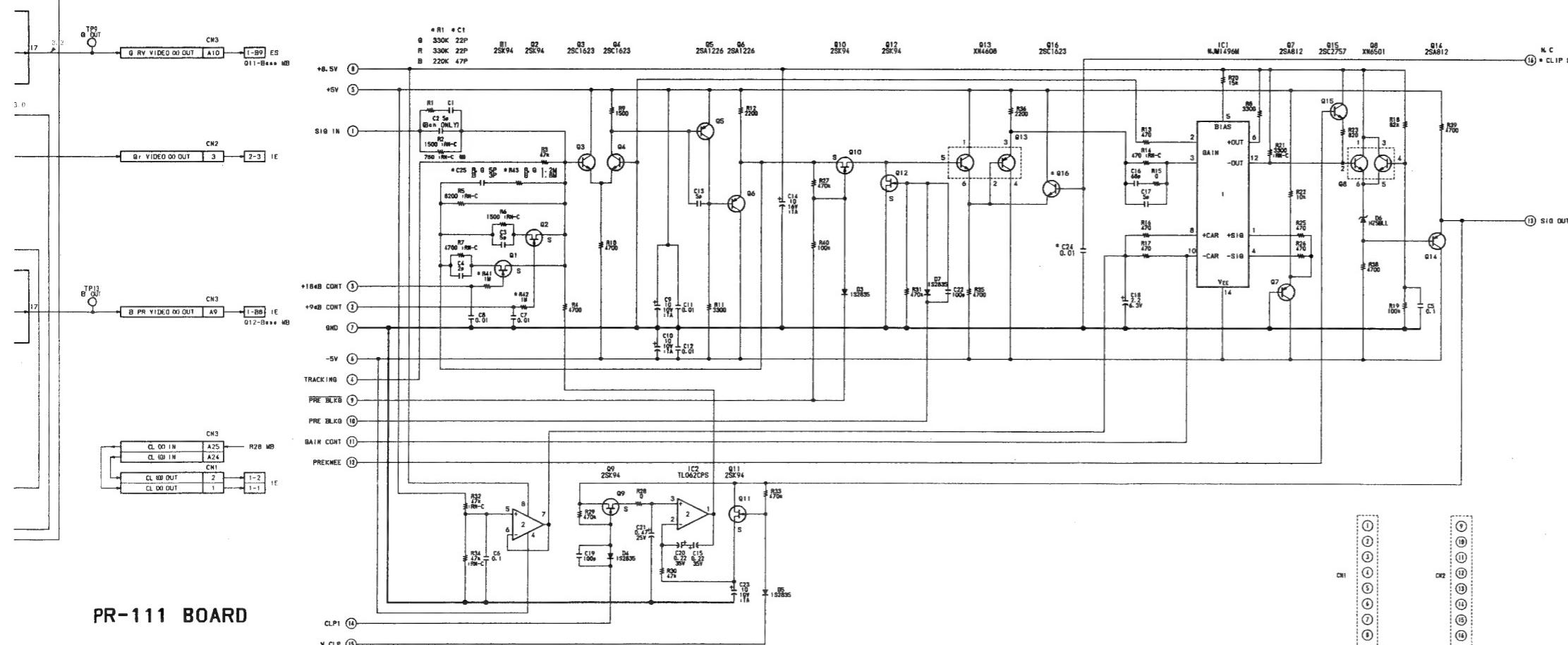
1. All voltage are dc, measured with a digital voltmeter. (input impedance: $10M\Omega$)
2. All waveforms are taken and DC voltage is measured in condition below.
 - Set camera FILTER selector to 1 position.
 - Set camera GAIN selector to 0dB position.
 - Shoot the grayscale pattern on the pattern box. Adjust lens iris so that a white level is 100IRE (For NTSC) or 700mV (For PAL) using the waveform monitor.







PR-109



PR-111 BOARD

BOARD	REF No	CHANGE INFORMATION	SER No
PR-111	C2, 3, 4, 5	100P → 56P	10921 and higher (U)
	R1, 4, 7, 10	10K → 8200	30611 and higher (U)
	R2, 5, 8, 11	47K → 2200	41521 and higher (E)
	R3, 6, 9	3300 → 2700	
	R117	18K	11271 and higher (U)
	R118	33K	30811 and higher (U)
	D4	1S1555 → 1S2835	42081 and higher (E)
VA-70	C1	R, G, B 5P → 22P Bch 22P → 47P	10921 and higher (U) 30611 and higher (U)
	R1	Rch 470K → 330K Gch 680K → 330K	42081 and higher (E)
	R41, R42	D1, D2 → R41, 42 1S2835 → 1M	
	C25, Q43	ADD	
	C24, Q16	ADD	11271 and higher (U) 30811 and higher (U) 42081 and higher (E)

VA-70 BOARD

ES-1 BOARD

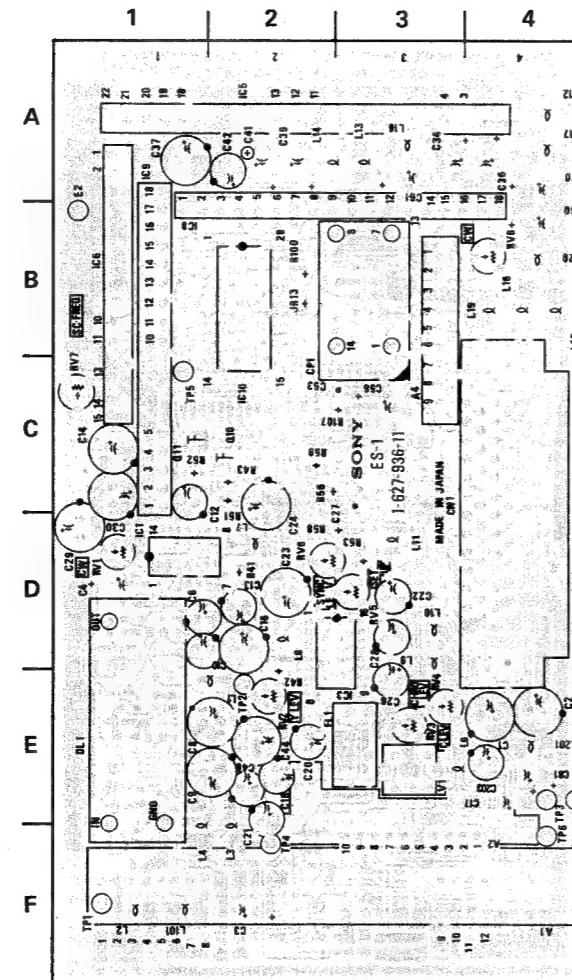
Ser. No. 10001-11270 (UC)
 30001-30810 (J)
 40001-42080 (EK)

ES-1 (1-627-936-11)

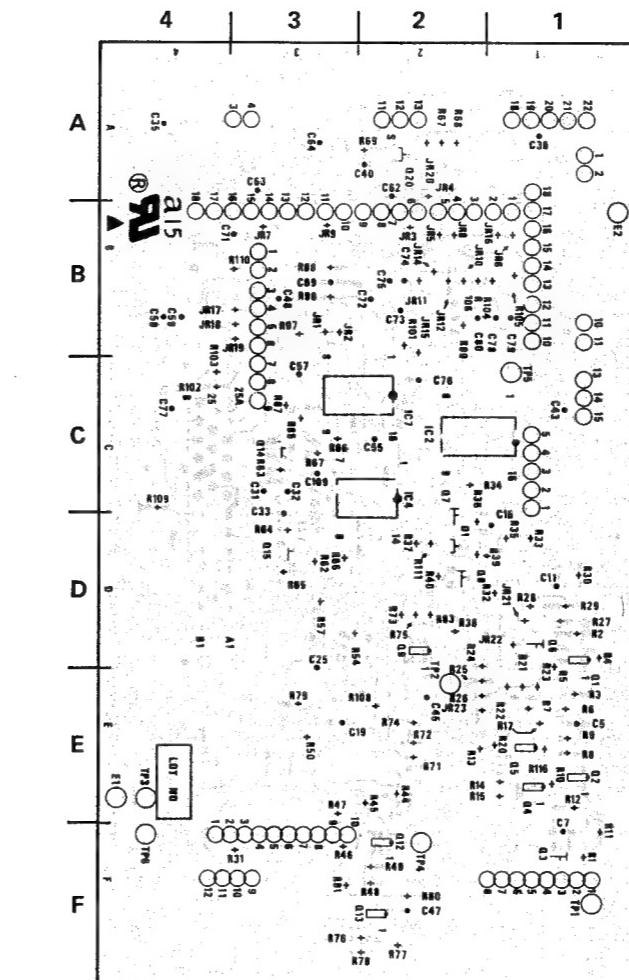
CN1 D-4
 CP1 B-3
 D1 D-2
 DL1 E-1
 E1 E-4
 E2 B-1
 FL1 E-4
 IC1 D-1
 IC2 C-2
 IC3 D-3
 IC4 C-2
 IC5 A-2
 IC6 B-1
 IC7 C-2
 IC8 B-2
 IC9 B-1
 IC10 B-2
 LV1 E-3
 Q1 D-1
 Q2 E-1
 Q3 F-1
 Q4 E-1
 Q5 E-1
 Q6 D-1
 Q7 D-2
 Q8 D-2
 Q9 D-2
 Q10 C-2
 Q11 C-1
 Q12 F-2
 Q13 F-2
 Q14 C-3
 Q15 D-3
 Q20 A-2

RV1 D-1
 RV2 E-2
 RV3 E-3
 RV4 E-3
 RV5 D-3
 RV6 D-2
 RV7 C-1
 RV8 B-4

TP1 F-1
 TP2 E-2
 TP3 E-4
 TP5 C-1
 TP6 F-4



C-28 (a)



C-29 (a)

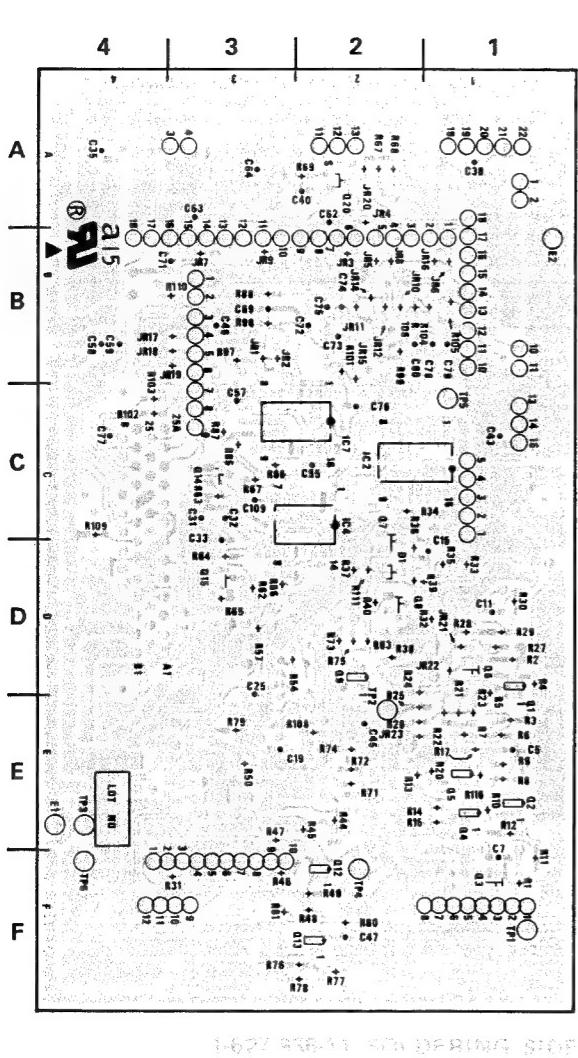
ES-1 (1-627-936-11)

CN1 D-4
 CP1 B-3
 D1 D-2
 DL1 E-1
 E1 E-4
 E2 B-1
 FL1 E-4
 IC1 D-1
 IC2 C-2
 IC3 D-3
 IC4 C-2
 IC5 A-2
 IC6 B-1
 IC7 C-2
 IC8 B-2
 IC9 B-1
 IC10 B-2
 LV1 E-3
 Q1 D-1
 Q2 E-1
 Q3 F-1
 Q4 E-1
 Q5 E-1
 Q6 D-1
 Q7 D-2
 Q8 D-2
 Q9 D-2
 Q10 C-2
 Q11 C-1
 Q12 F-2
 Q13 F-2
 Q14 C-3
 Q15 D-3
 Q20 A-2

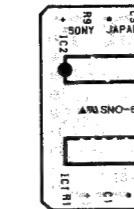
RV1 D-1
 RV2 E-2
 RV3 E-3
 RV4 E-3
 RV5 D-3
 RV6 D-2
 RV7 C-1
 RV8 B-4

TP1 F-1
 TP2 E-2
 TP3 E-4
 TP5 C-1
 TP6 F-4

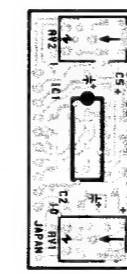
BKG-4 BOARD (NTSC ONLY)

**ES-1 (1-627-936-11)**

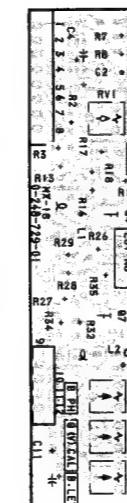
CN1	D-4
CP1	B-3
D1	D-2
DLL1	E-1
E1	E-4
E2	B-1
FL1	E-4
IC1	D-1
IC2	C-2
IC3	D-3
IC4	C-2
IC5	A-2
IC6	B-1
IC7	C-2
IC8	B-2
IC9	B-1
IC10	B-2
LV1	E-3
Q1	D-1
Q2	E-1
Q3	F-1
Q4	E-1
Q5	E-1
Q6	D-1
Q7	D-2
Q8	D-2
Q9	D-2
Q10	C-2
Q11	C-1
Q12	F-2
Q13	F-2
Q14	C-3
Q15	D-3
Q20	A-2
RV1	D-1
RV2	E-2
RV3	E-3
RV4	E-3
RV5	D-3
RV6	D-2
RV7	C-1
RV8	B-4
TP1	F-1
TP2	E-2
TP3	E-4
TP5	C-1
TP6	F-4

CM-22 BOARD

**Ser. No. 10001-11270 (UC)
30001-30810 (J)
40001-42080 (EK)**



**Ser. No. 10001-11270 (UC)
30001-30810 (J)
40001-42080 (EK)**

**C-30 (a)****C-29 (a)**

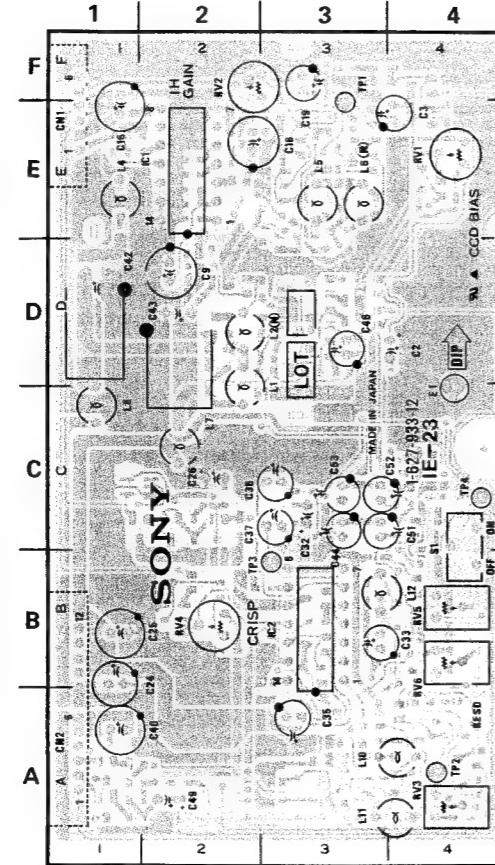
**DXC-325 (J, UC)
DXC-325P (EK)**

ES-1 BOARD

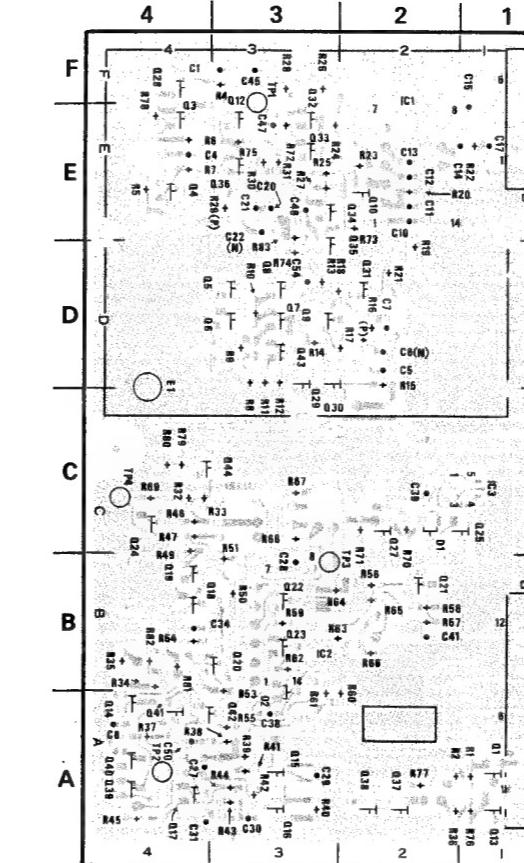
Ser. No. 11271-	(UC)
30811-	(J)
42081-	(EK)

ES-1 (1-627-936-12)

CN1 E-1
CP1 B-3
D1 D-2
DL1 E-1
E1 E-4
E2 B-1
FL1 E-4
IC1 D-1
IC2 C-2
IC3 D-3
IC4 C-2
IC5 A-2
IC6 B-1
IC7 C-2
IC8 B-2
IC9 B-1
IC10 B-2
LV1 E-3
Q1 D-1
Q2 E-1
Q3 F-1
Q4 E-1
Q5 E-1
Q6 D-1
Q7 D-2
Q8 D-2
Q9 D-2
Q10 C-2
Q11 C-1
Q12 F-2
Q13 F-2
Q14 C-3
Q15 D-3
Q20 A-2



1-627-936-12 COMPONENT SIDE



1-627-936-12 SOLDERING AREA

ES-1 (1-627-936-12)

CN1 E-1
CP1 B-3
D1 D-2
DL1 E-1
E1 E-4
E2 B-1
FL1 E-4
IC1 D-1
IC2 C-2
IC3 D-3
IC4 C-2
IC5 A-2
IC6 B-1
IC7 C-2
IC8 B-2
IC9 B-1
IC10 B-2
LV1 E-3
Q1 D-1
Q2 E-1
Q3 F-1
Q4 E-1
Q5 E-1
Q6 D-1
Q7 D-2
Q8 D-2
Q9 D-2
Q10 C-2
Q11 C-1
Q12 F-2
Q13 F-2
Q14 C-3
Q15 D-3
Q20 A-2

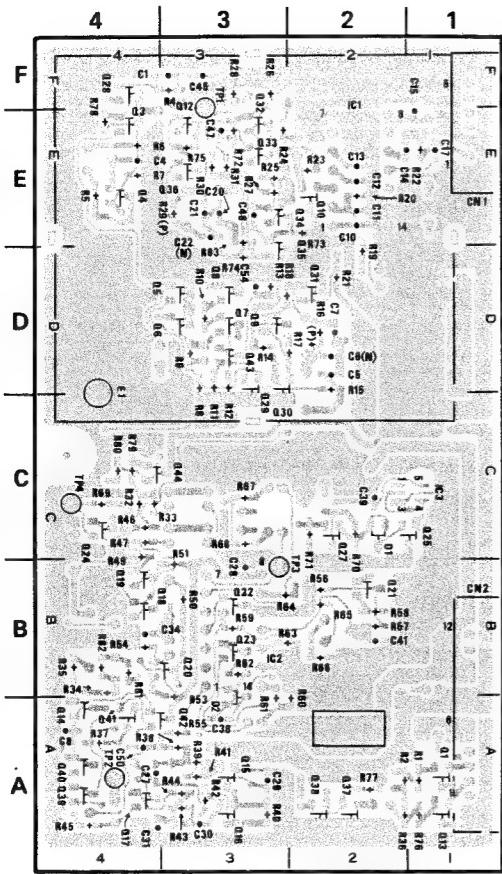
RV1 D-1
RV2 E-2
RV3 E-3
RV4 F-3
RV5 D-3
RV6 D-2
RV7 C-1
RV8 B-4

TP1 F-3
TP2 A-4
TP3 B-3
TP4 C-4
TP5 C-1
TP6 F-4

CM

MX

BKG-4 BOARD (NTSC ONLY)

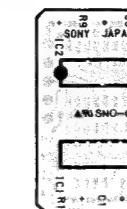


ES-1 (1-627-936-12)

CN1 E-1
CPL1 B-3
D1 D-2
DLL1 E-1
E1 E-4
E2 B-1
FLL1 E-4
IC1 D-1
IC2 C-2
IC3 D-3
IC4 C-2
IC5 A-2
IC6 B-1
IC7 C-2
IC8 B-2
IC9 B-1
IC10 B-2
LV1 E-3
Q1 D-1
Q2 E-1
Q3 F-1
Q4 E-1
Q5 E-1
Q6 D-1
Q7 D-2
Q8 D-2
Q9 D-2
Q10 C-2
Q11 C-1
Q12 F-2
Q13 F-2
Q14 C-3
Q15 D-3
Q20 A-2
RV1 D-1
RV2 E-2
RV3 E-3
RV4 F-3
RV5 D-3
RV6 D-2
RV7 C-1
RV8 B-4
TP1 F-3
TP2 A-4
TP3 B-3
TP4 C-4
TP5 C-1
TP6 F-4



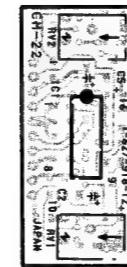
1-627-921-11 COMPONENT SIDE



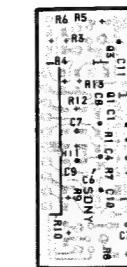
1-627-921-11 SOLDERING SIDE

CM-22 BOARD

Ser. No. 11271- (UC)
30811- (J)
42081- (EK)



1-627-918-12 COMPONENT SIDE



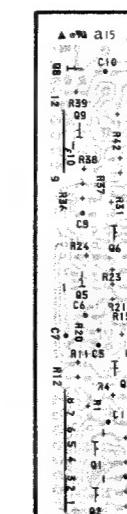
1-627-918-12 SOLDERING SIDE

MX-18 BOARD

Ser. No. 11271- (UC)
30811- (J)
42081- (EK)



1-627-919-12 COMPONENT SIDE

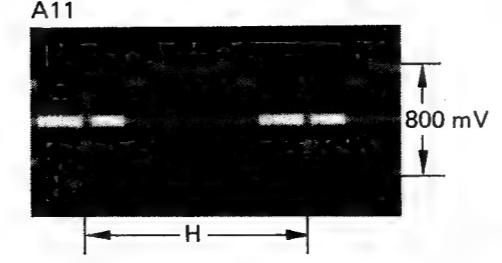
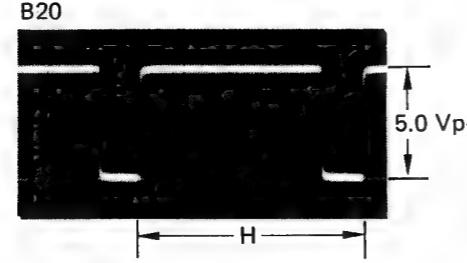
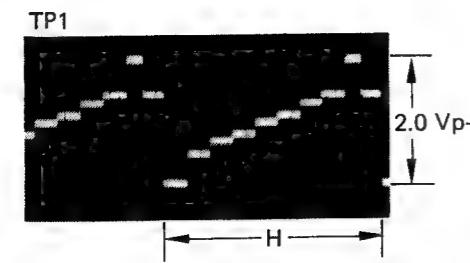
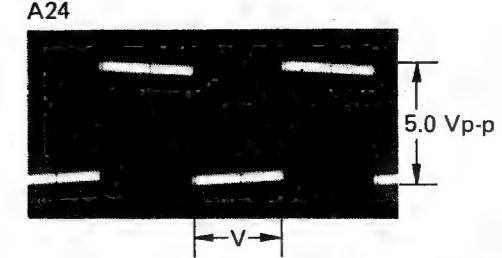
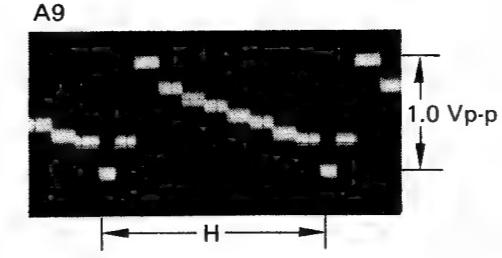
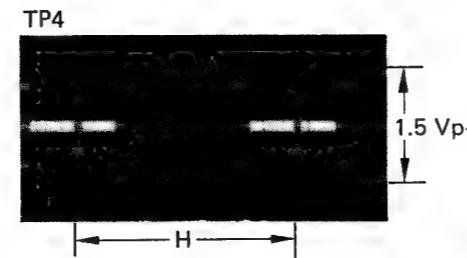
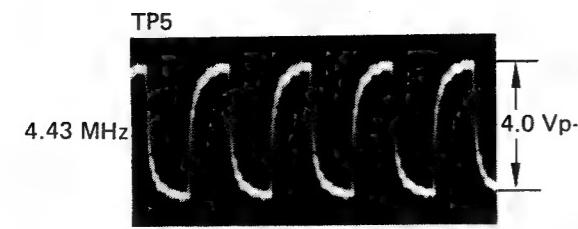
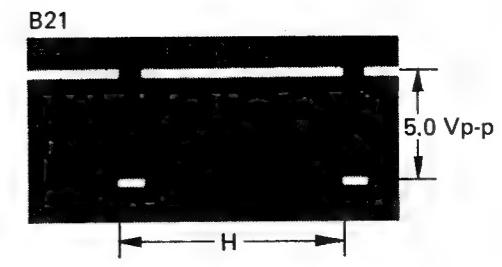
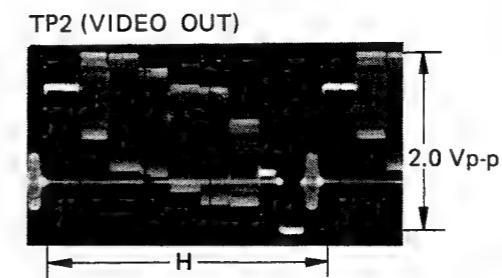
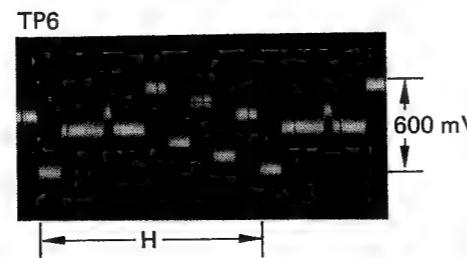
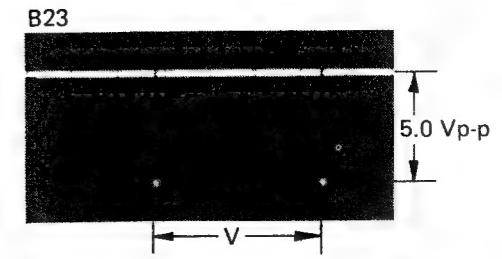
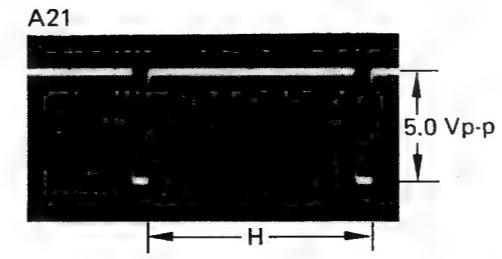
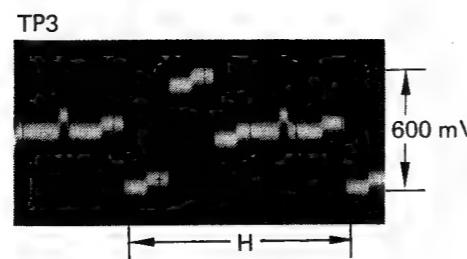
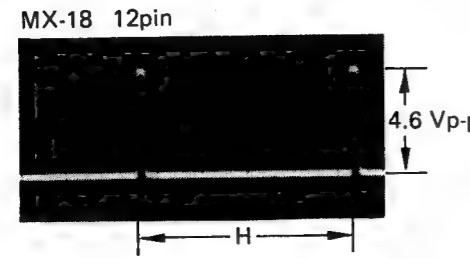


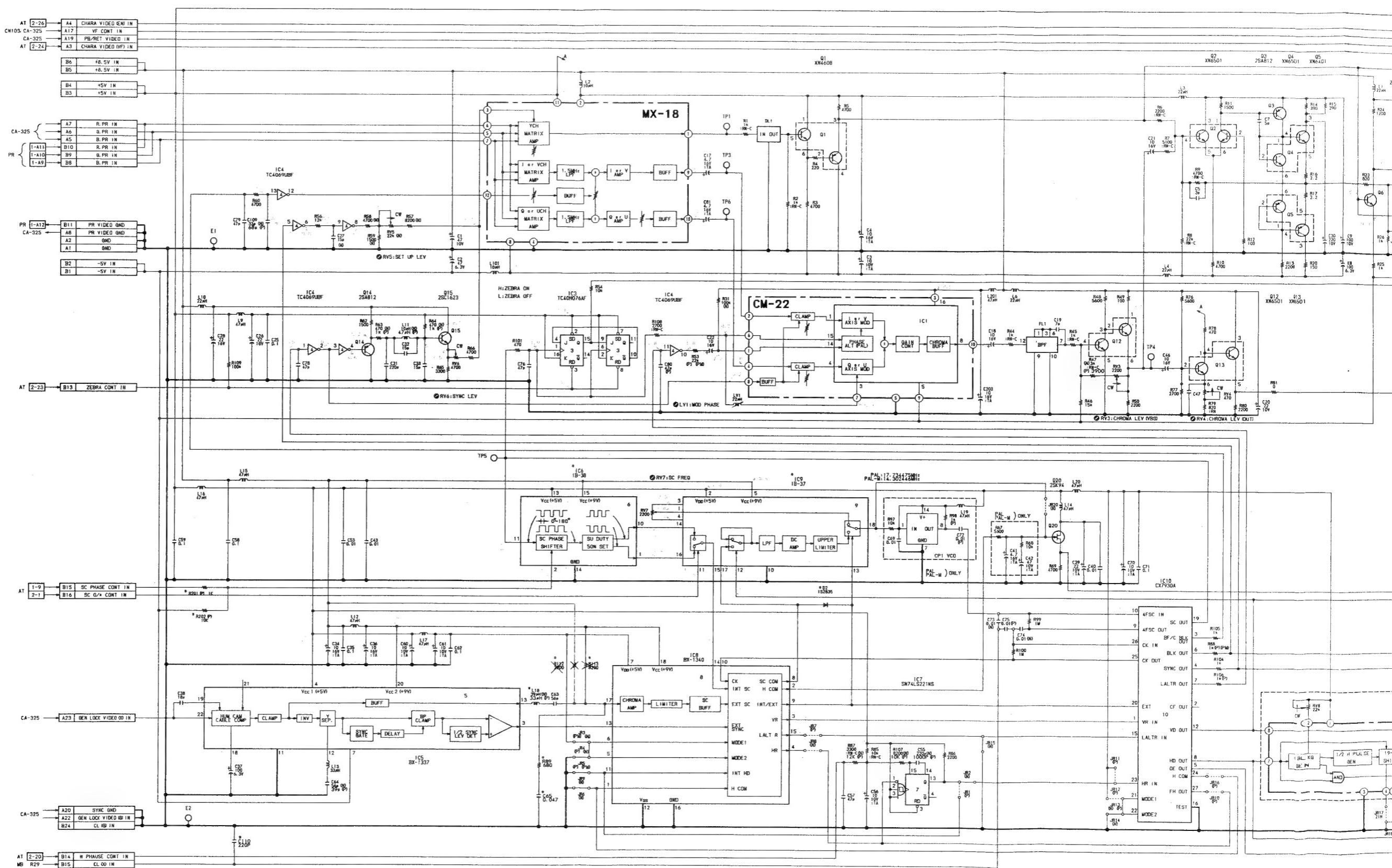
1-627-919-12 SOLDERING SIDE

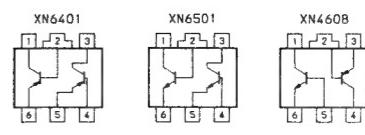
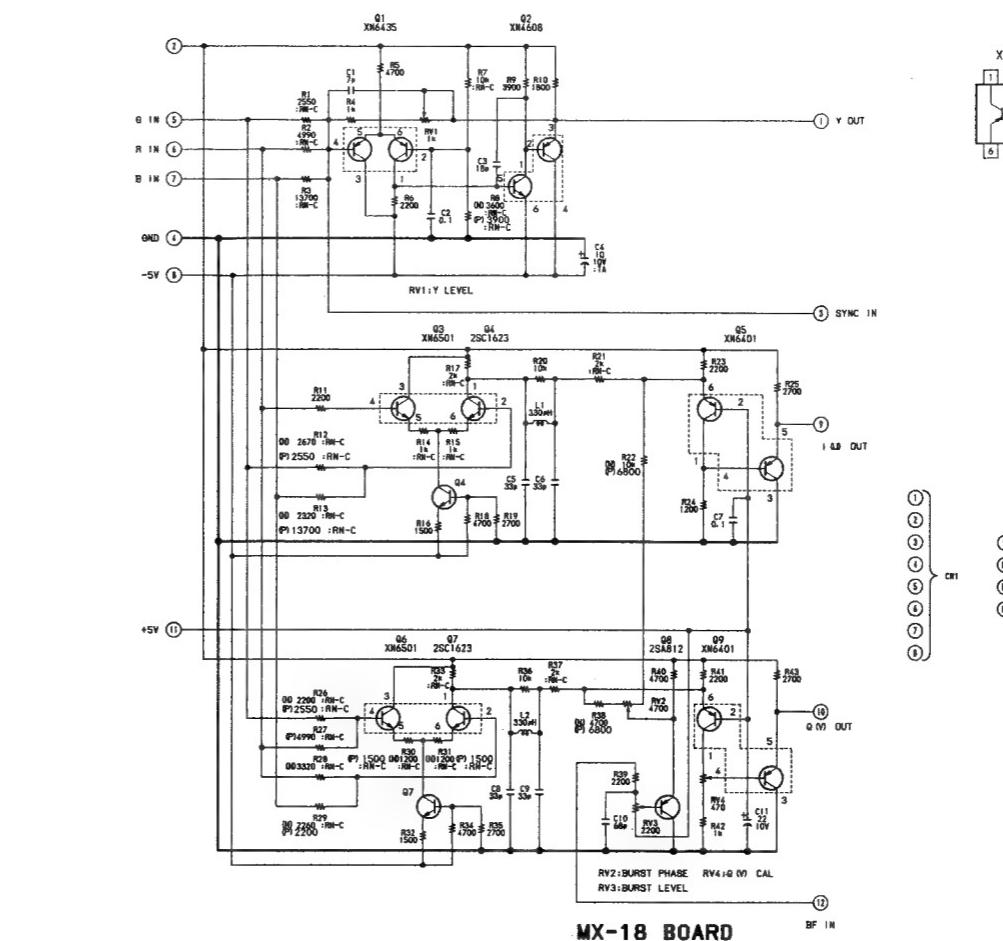
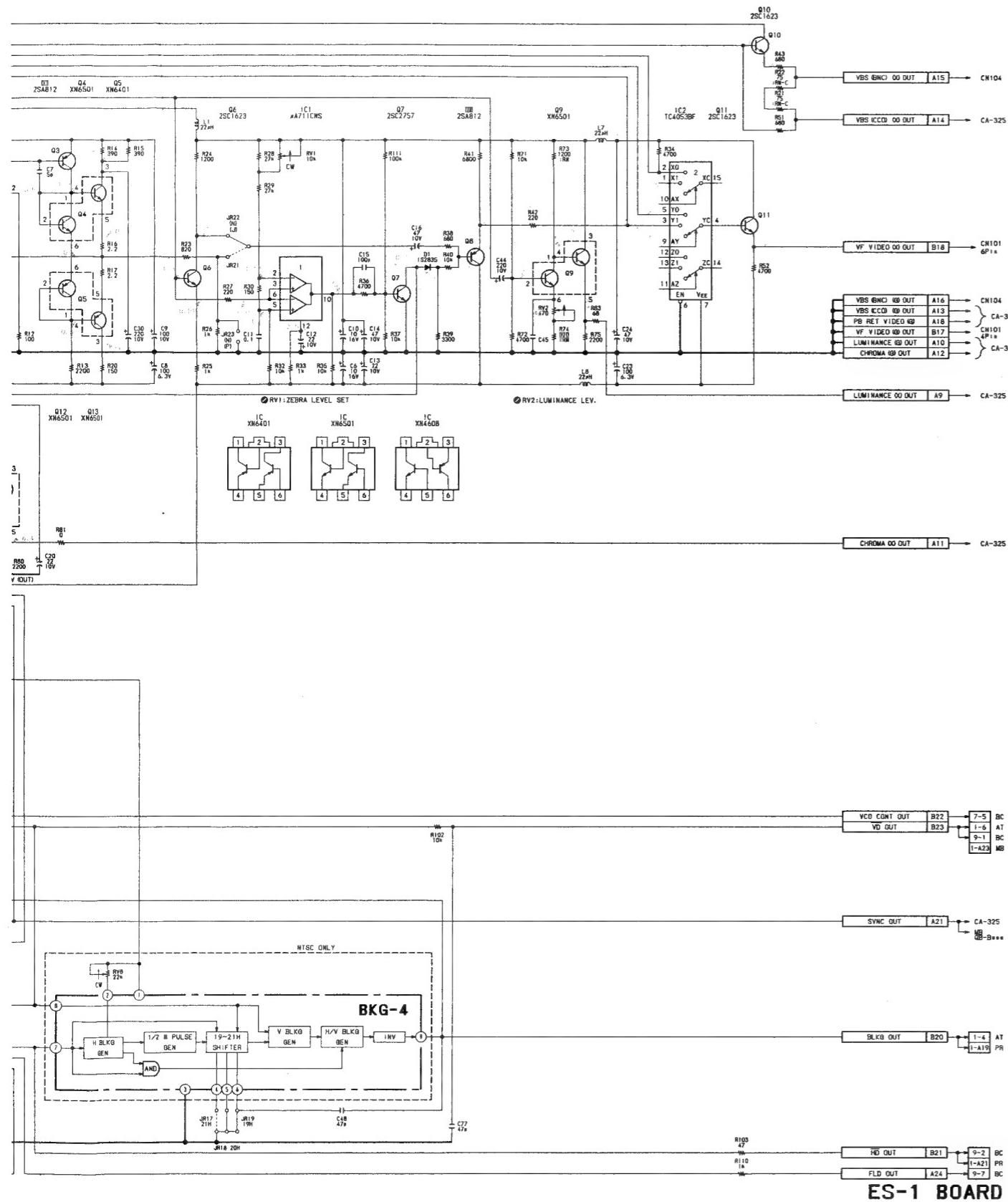
ES-1

NOTE:

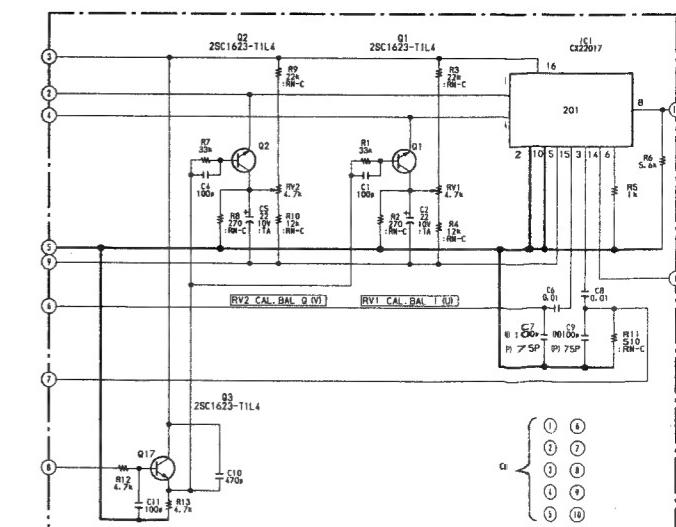
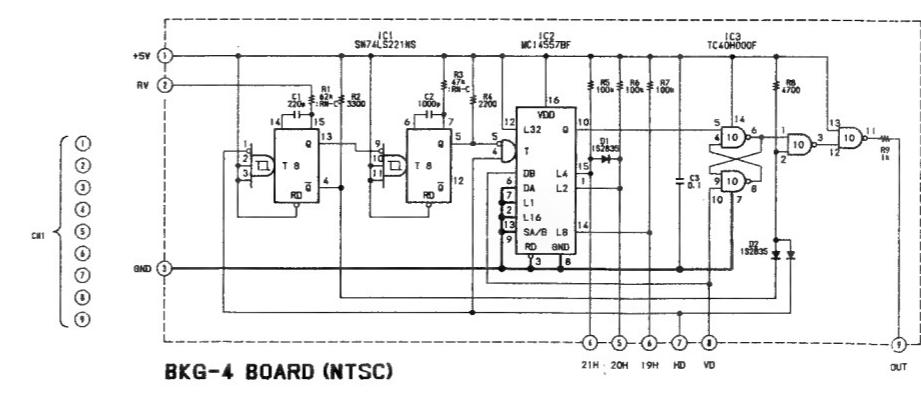
1. All voltage are dc, measured with a digital voltmeter. (input impedance: $10M\Omega$)
2. All waveforms are taken and DC voltage is measured in condition below.
3. Set camera BARS/WB selector to BARS position.
4. Supply a color-bar signal to the GEN LOCK IN terminal.
5. DC voltage is measured in condition below.
6. Work the camera in the INT mode.







* NOTE		
REF No	CHANGE INFORMATION	SER No
I6	BX-1339A → IB-38	10921 - (JC) 30611 - (J) 41521 - (EK)
D2	IS2835	11271 and higher
C65	0.047 ADD	30811 and higher
R89	680 ADD	42081 and higher
R112	2.2K DELETE	
R113	8.2K DELETE	
L18	56MH → 39MH (NTSC)	
C110	22P → ADD	11721 - (JC) 30841 - (J)



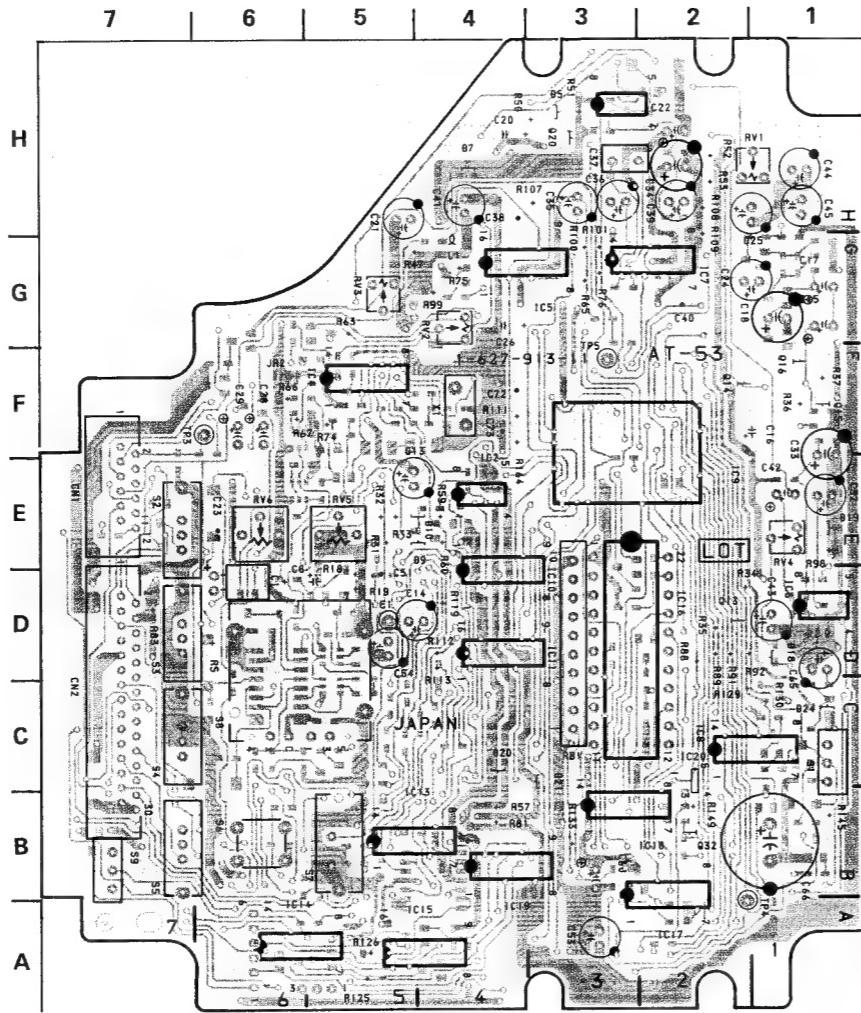
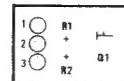
AT-53 BOARD

Ser. No. 10001-11270 (UC)
 30001-30810 (J)
 40001-42080 (EK)

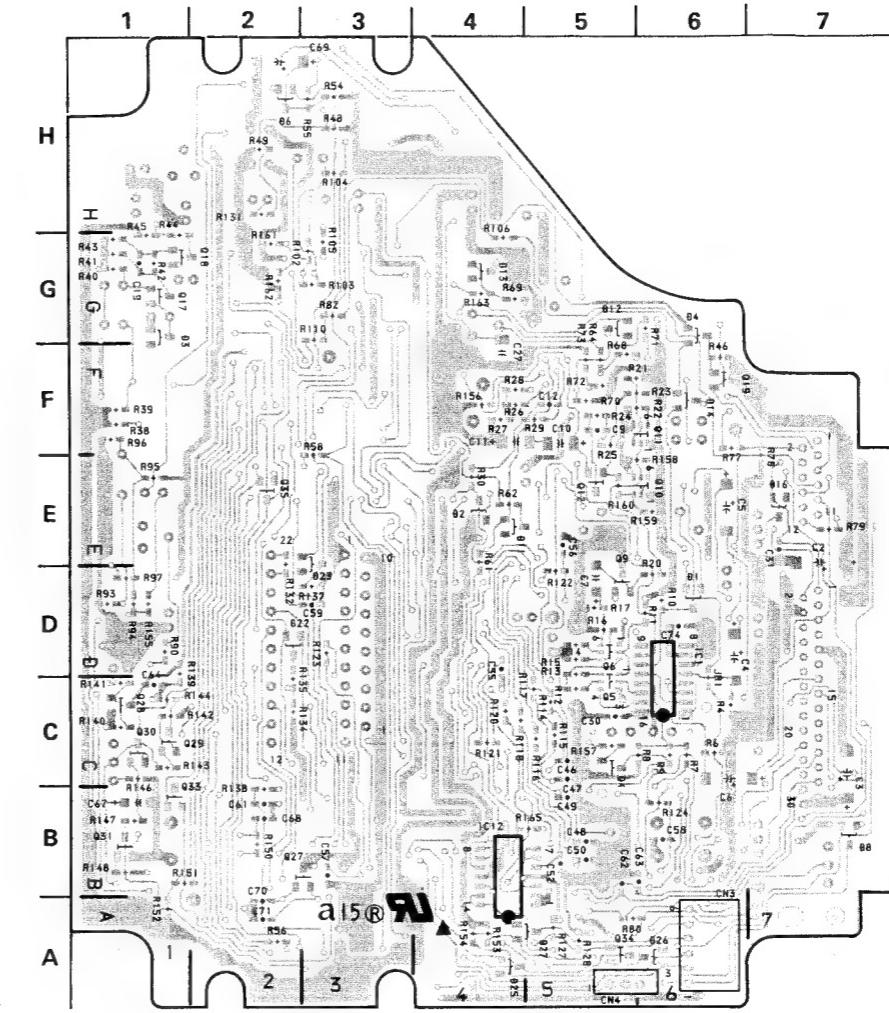
AT-53 (1-627-913-11)

CN1	E-7	Q4	C-5
CN2	C-7	Q5	C-5
CN3	A-6	Q6	D-5
CN4	A-5	Q9	D-5
		Q10	E-6
D1	D-6	Q11	F-6
D2	E-4	Q12	E-5
D3	G-1	Q13	D-2
D4	G-6	Q14	F-2
D5	H-3	Q15	F-1
D6	H-2	Q16	F-1
D7	H-4	Q17	G-1
D8	B-7	Q18	G-1
D9	E-4	Q19	F-6
D10	E-4	Q20	H-3
D11	E-4	Q27	B-2
D12	G-5	Q28	C-1
D13	G-4	Q29	C-1
D14	F-6	Q30	C-1
D16	E-7	Q31	B-1
D18	D-1	Q32	B-2
D19	E-1	Q33	B-1
D20	C-4	Q34	A-5
D21	C-3	Q35	E-2
D22	D-2		
D23	D-3	RB1	D-3
D24	C-1		
D25	A-4	RV1	H-1
D26	A-6	RV2	G-4
D27	A-5	RV3	G-5
E1	D-5	RV4	E-1
		RV5	E-5
		RV6	E-6
IC1	C-6		
IC2	E-4	S1	C-1
IC4	F-5	S2	E-7
IC5	G-3	S3	D-7
IC6	D-1	S4	C-7
IC7	G-2	S5	B-7
IC8	C-2	S6	B-6
IC10	D-4	S7	B-5
IC11	D-4	S8	C-6
IC12	B-4	S9	B-7
IC13	B-5		
IC14	A-6	TP3	F-6
IC15	A-4	TP4	A-2
IC16	D-3	TP5	F-3
IC17	B-2		
IC18	B-3	X1	F-4
IC19	B-4		
IC20	C-2		

DUS-289 BOARD



1-627-913-11 COMPONENT SIDE



1-627-913-11 SOLDERING SIDE

AT-53 (1-627-913-11)

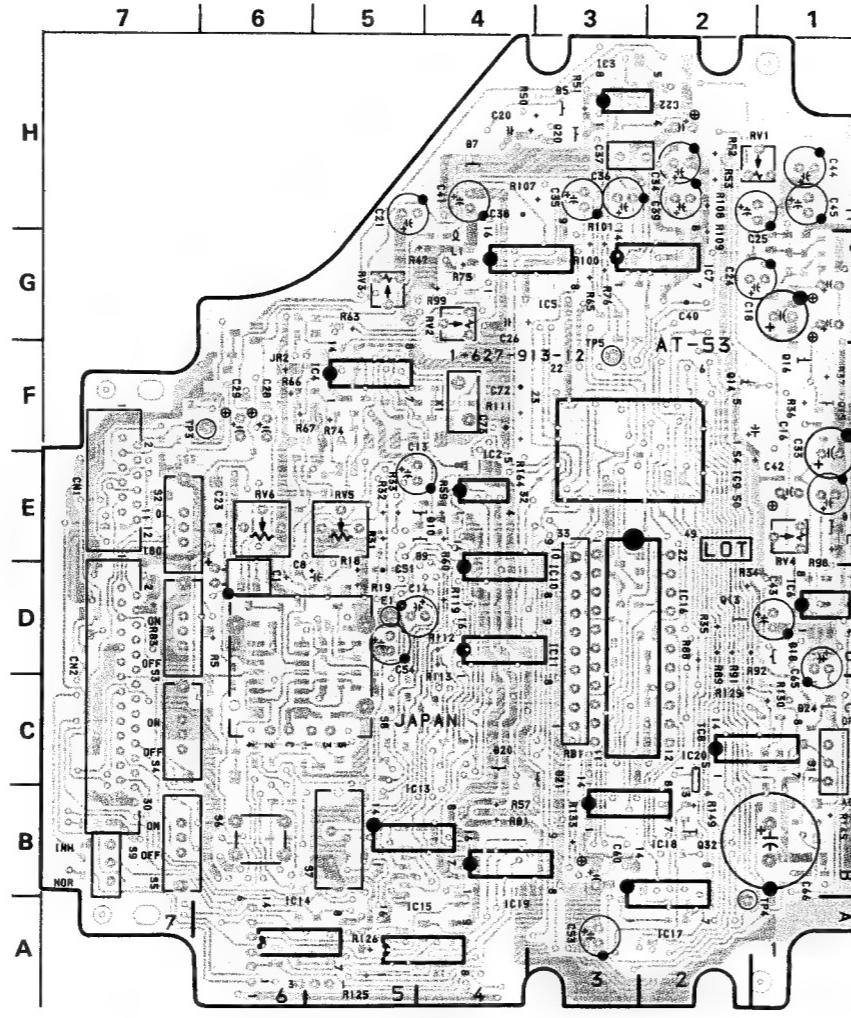
CN1	E-7	Q4	C-5
CN2	C-7	Q5	C-5
CN3	A-6	Q6	D-5
CN4	A-5	Q9	D-5
		Q10	E-6
D1	D-6	Q11	F-6
D2	E-4	Q12	E-5
D3	G-1	Q13	D-2
D4	G-6	Q14	F-2
D5	H-3	Q15	F-1
D6	H-2	Q16	F-1
D7	H-4	Q17	G-1
D8	B-7	Q18	G-1
D9	E-4	Q19	F-6
D10	E-4	Q20	H-3
D11	E-4	Q27	B-2
D12	G-5	Q28	C-1
D13	G-4	Q29	C-1
D14	F-6	Q30	C-1
D16	E-7	Q31	B-1
D18	D-1	Q32	B-2
D19	E-1	Q33	B-1
D20	C-4	Q34	A-5
D21	C-3	Q35	E-2
D22	D-2		
D23	D-3	RB1	D-3
D24	C-1		
D25	A-4	RV1	H-1
D26	A-6	RV2	G-4
D27	A-5	RV3	G-5
E1	D-5	RV4	E-1
		RV5	E-5
		RV6	E-6
IC1	C-6		
IC2	E-4	S1	C-1
IC4	F-5	S2	E-7
IC5	G-3	S3	D-7
IC6	D-1	S4	C-7
IC7	G-2	S5	B-7
IC8	C-2	S6	B-6
IC10	D-4	S7	B-5
IC11	D-4	S8	C-6
IC12	B-4	S9	B-7
IC13	B-5		
IC14	A-6	TP3	F-6
IC15	A-4	TP4	A-2
IC16	D-3	TP5	F-3
IC17	B-2		
IC18	B-3	X1	F-4
IC19	B-4		
IC20	C-2		

AT-53 BOARD

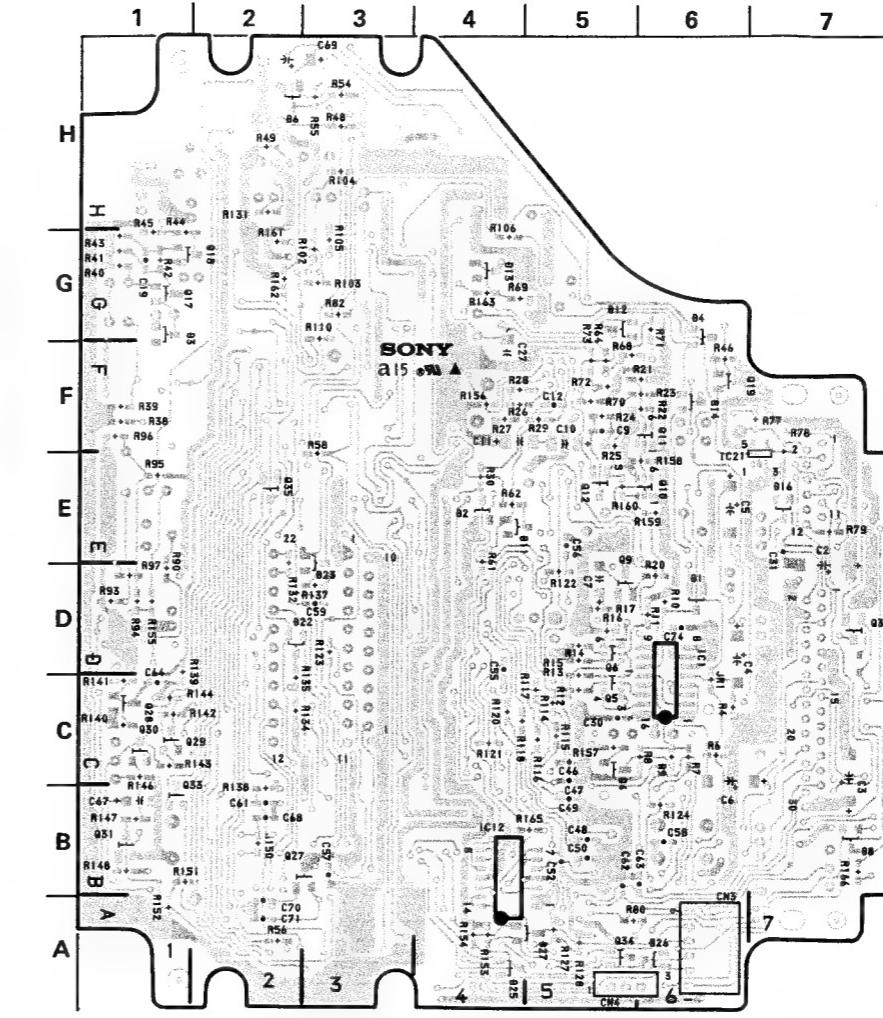
Ser. No. 11271-	(UC)
30811-	(J)
42081-	(EK)

AT-53 (1-627-913-12)

CN1	E-7	Q4	C-5
CN2	C-7	Q5	C-5
CN3	A-6	Q6	D-5
CN4	A-5	Q9	D-5
D1	D-6	Q10	E-6
D2	E-4	Q11	F-6
D3	G-1	Q12	E-5
D4	G-6	Q13	D-2
D5	H-3	Q14	F-2
D6	H-2	Q15	F-1
D7	H-4	Q16	F-1
D8	B-7	Q17	G-1
D9	E-4	Q18	G-1
D10	E-4	Q19	F-6
D11	E-4	Q20	H-3
D12	G-5	Q27	B-2
D13	G-4	Q28	C-1
D14	F-6	Q29	C-1
D16	E-7	Q30	C-1
D18	D-1	Q31	B-1
D19	E-1	Q32	B-2
D20	C-4	Q33	B-1
D21	C-3	Q34	A-5
D22	D-2	Q35	E-2
D23	D-3	RB1	D-3
D24	C-1		
D25	A-4	RV1	H-1
D26	A-6	RV2	G-4
D27	A-5	RV3	G-5
E1	D-5	RV4	E-1
		RV5	E-5
		RV6	E-6
IC1	C-6		
IC2	E-4	S1	C-1
IC4	F-5	S2	E-7
IC5	G-3	S3	D-7
IC6	D-1	S4	C-7
IC7	G-2	S5	B-7
IC8	C-2	S6	B-6
IC10	D-4	S7	B-5
IC11	D-4	S8	C-6
IC12	B-4	S9	B-7
IC13	B-5		
IC14	A-6	TP3	F-6
IC15	A-4	TP4	A-2
IC16	D-3	TP5	F-3
IC17	B-2		
IC18	B-3	X1	F-4
IC19	B-4		
IC20	C-2		



1-627-913-12 COMPONENT SIDE

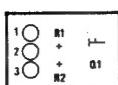


1-627-913-12 SOLDERING SIDE

AT-53 (1-627-913-12)

CN1	E-7	Q4	C-5
CN2	C-7	Q5	C-5
CN3	A-6	Q6	D-5
CN4	A-5	Q9	D-5
D1	D-6	Q10	E-6
D2	E-4	Q11	F-6
D4	G-6	Q12	E-5
D5	H-3	Q13	D-2
D6	H-2	Q15	F-1
D7	H-4	Q16	F-1
D8	B-7	Q17	G-1
D9	E-4	Q18	G-1
D10	E-4	Q19	F-6
D11	E-4	Q20	H-3
D12	G-5	Q27	B-2
D13	G-4	Q28	C-1
D14	F-6	Q29	C-1
D16	E-7	Q30	C-1
D18	D-1	Q31	B-1
D19	E-1	Q32	B-2
D20	C-4	Q33	B-1
D21	C-3	Q34	A-5
D22	D-2	Q35	E-2
D23	D-3		Q36
D24	C-1		D-7
D25	A-4		
D26	A-6		
D27	A-5		
E1	D-5		
		RV1	H-1
		RV2	G-4
		RV3	G-5
		RV4	E-1
		RV5	E-5
		RV6	E-6
IC1	C-6		
IC2	E-4		
IC3	H-3		
IC4	F-5		S1 C-1
IC5	G-3		S2 E-7
IC6	D-1		S3 D-7
IC7	G-2		S4 C-7
IC8	C-2		S5 B-7
IC9	E-3		S6 B-6
IC10	D-4		S7 B-5
IC11	D-4		S8 C-6
IC12	B-4		S9 B-7
IC13	B-5		
IC14	A-6	TP3	F-6
IC15	A-4	TP4	A-2
IC16	D-3	TP5	F-3
IC17	B-2		
IC18	B-3	X1	F-4
IC19	B-4		
IC20	C-2		
IC21	F-7		

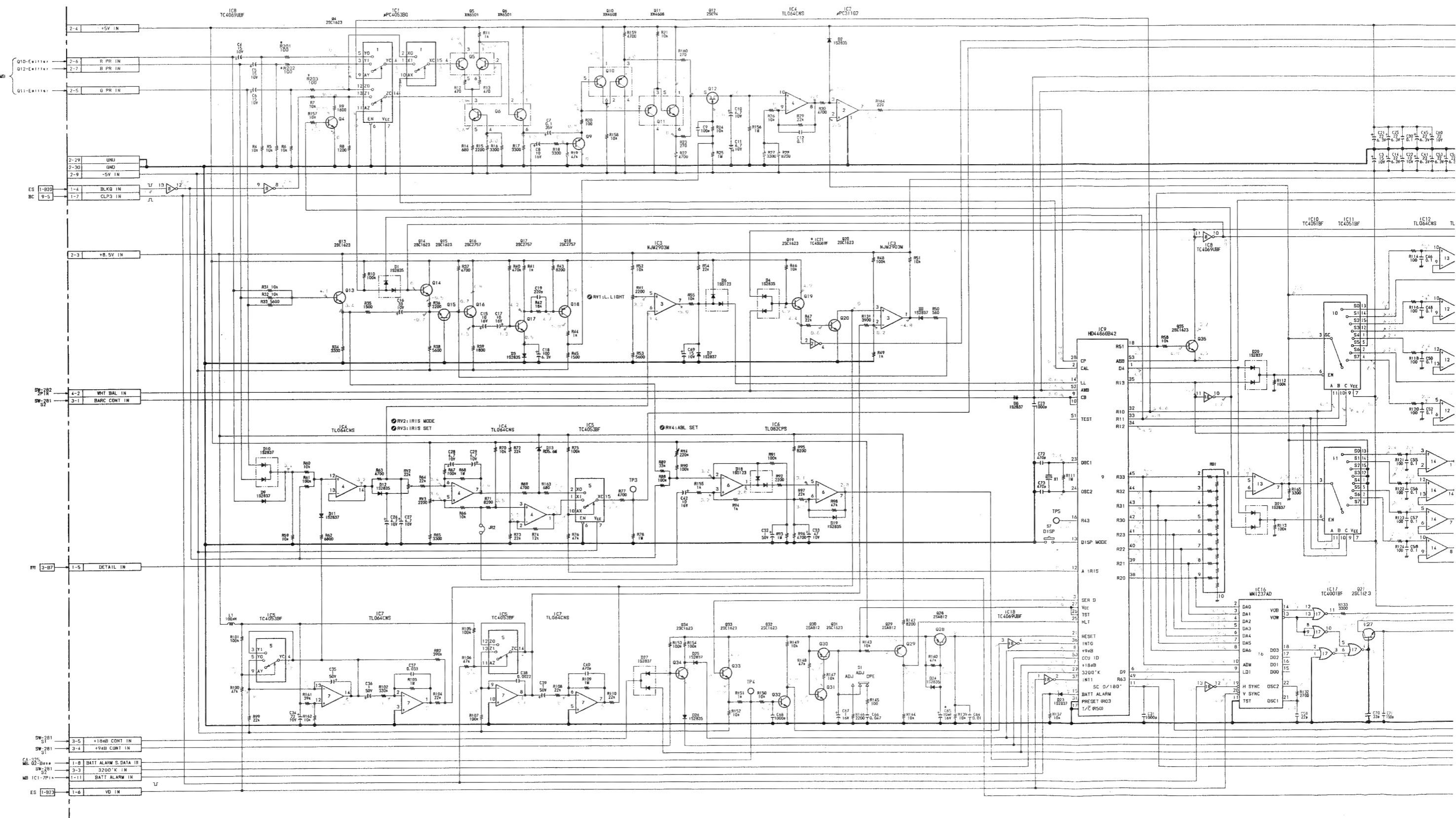
DUS-289 BOARD

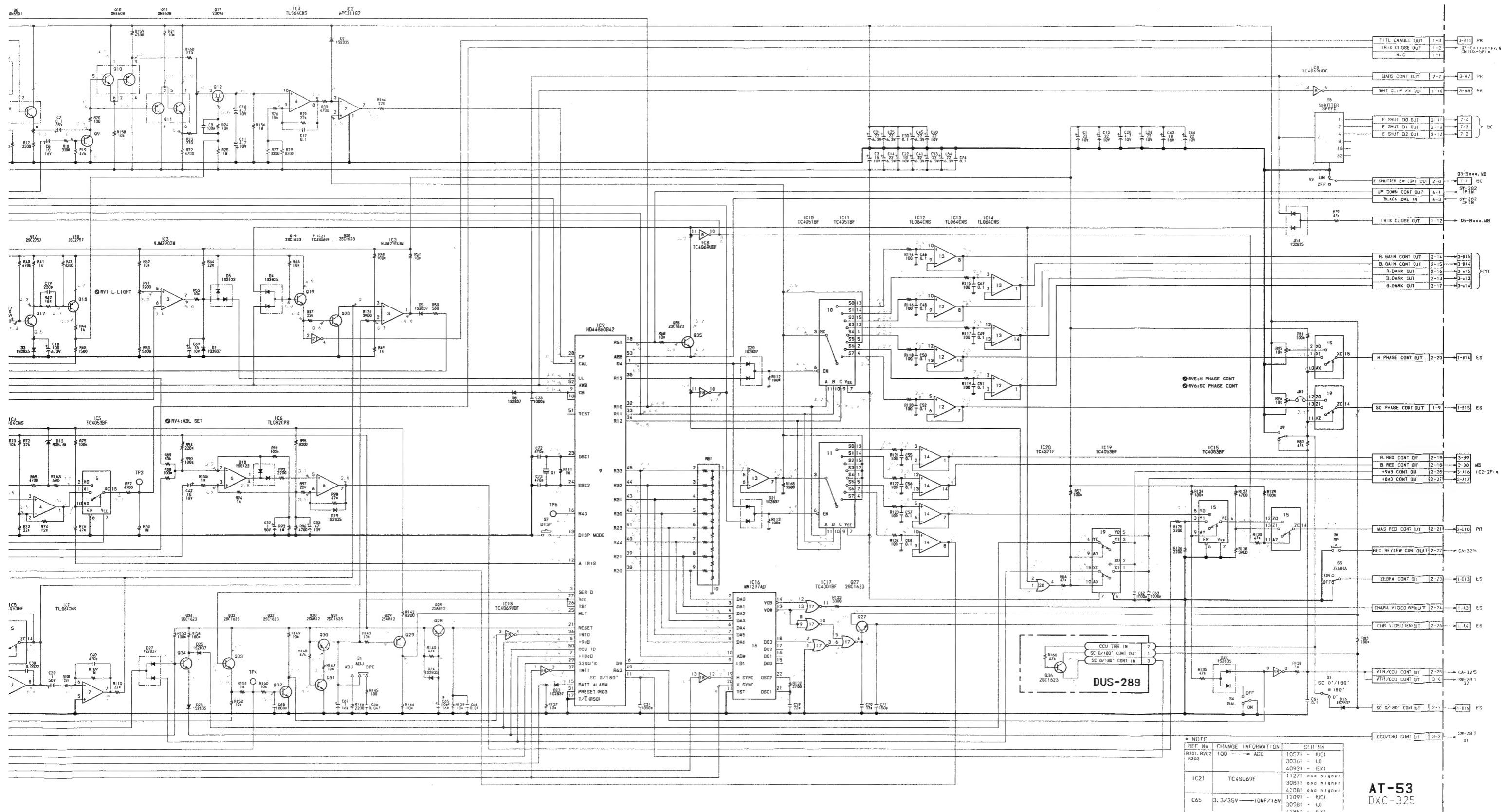


C-37 (b)

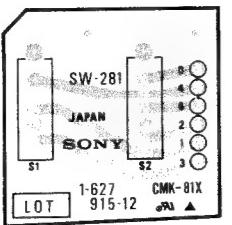
C-38 (b)

DXC-325 (J, UC)
DXC-325P (EK)

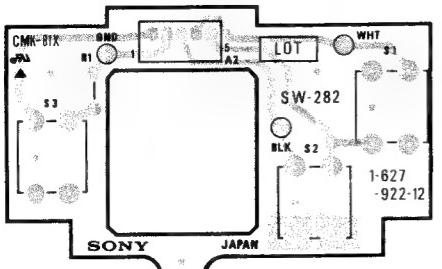


AT-53
DXC-325

SW-281 BOARD



SW-282 BOARD



MB-190 BOARD

Ser. No. 10001-10250 (UC)
30001-30150 (J)
40001-40350 (EK)

MB-190 (1-627-914-11,12)

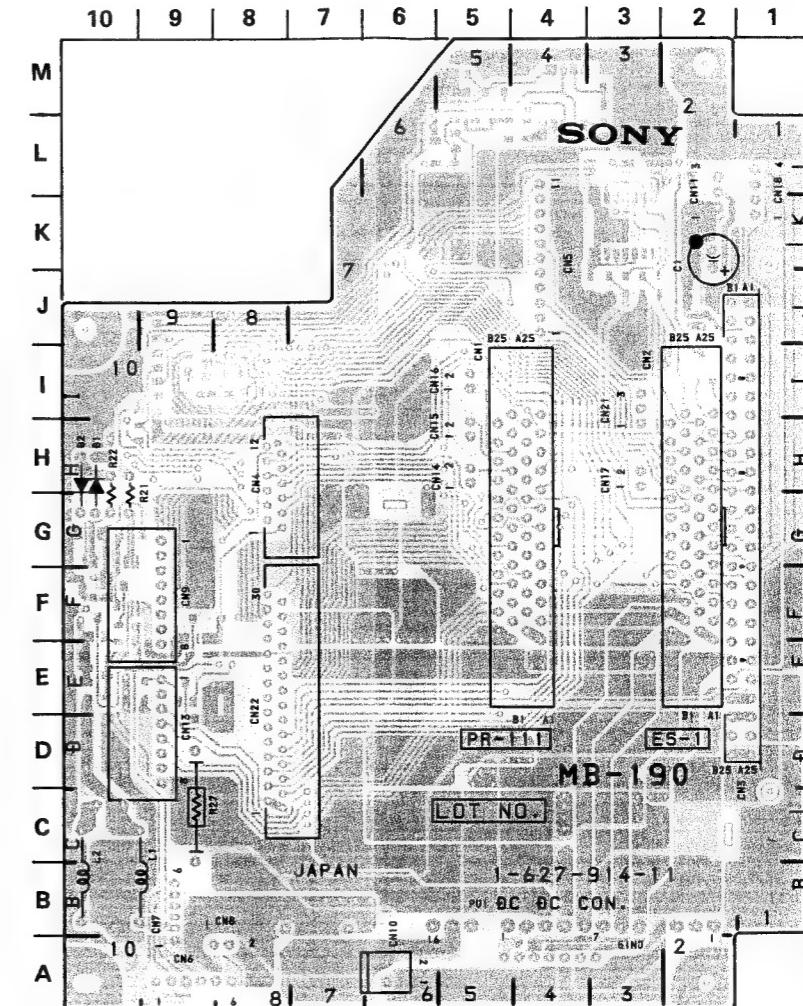
CN1	G-4
CN2	G-2
CN3	G-1
CN4	H-7
CN5	K-4
CN6	A-4
CN7	B-9
CN8	A-8
CN9	F-9
CN10	A-6
CN11	L-2
CN13	D-9
CN14	H-5
CN15	H-5
CN16	I-5
CN17	H-3
CN18	L-1
CN19	A-4
CN21	I-3
CN22	E-7

D1	H-10
D2	H-10
D3	E-10

IC1	M-4
IC2	I-8
IC3	K-3

PU1	B-2
-----	-----

Q1	M-5
Q2	L-5
Q3	I-8
Q4	I-9
Q5	E-9
Q6	F-10
Q7	F-10
Q8	G-10
Q9	G-10
Q10	J-9
Q11	I-9
Q12	I-9



MB-190 BOARD

Ser. No. 10001-10250 (UC)
 30001-30150 (J)
 40001-40350 (EK)

MB-190 (1-627-914-11,12)

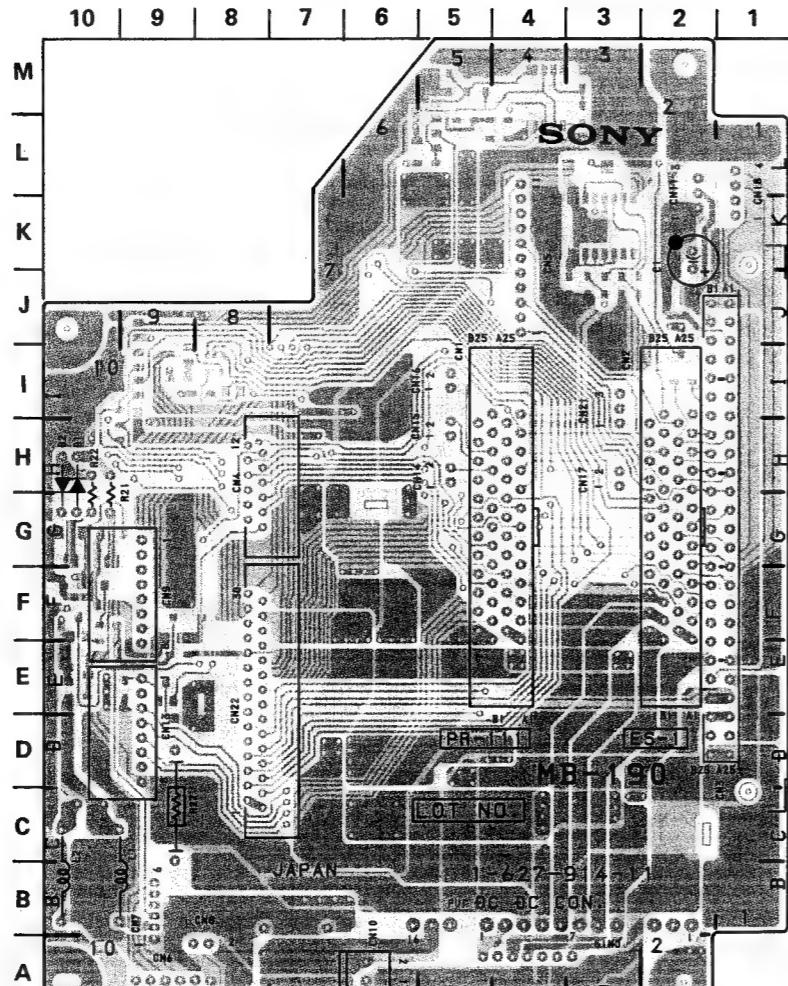
CN1 G-4
 CN2 G-2
 CN3 G-1
 CN4 H-7
 CN5 K-4
 CN6 A-4
 CN7 B-9
 CN8 A-8
 CN9 F-9
 CN10 A-6
 CN11 L-2
 CN13 D-9
 CN14 H-5
 CN15 H-5
 CN16 I-5
 CN17 H-3
 CN18 L-1
 CN19 A-4
 CN21 I-3
 CN22 E-7

D1 H-10
 D2 H-10
 D3 E-10

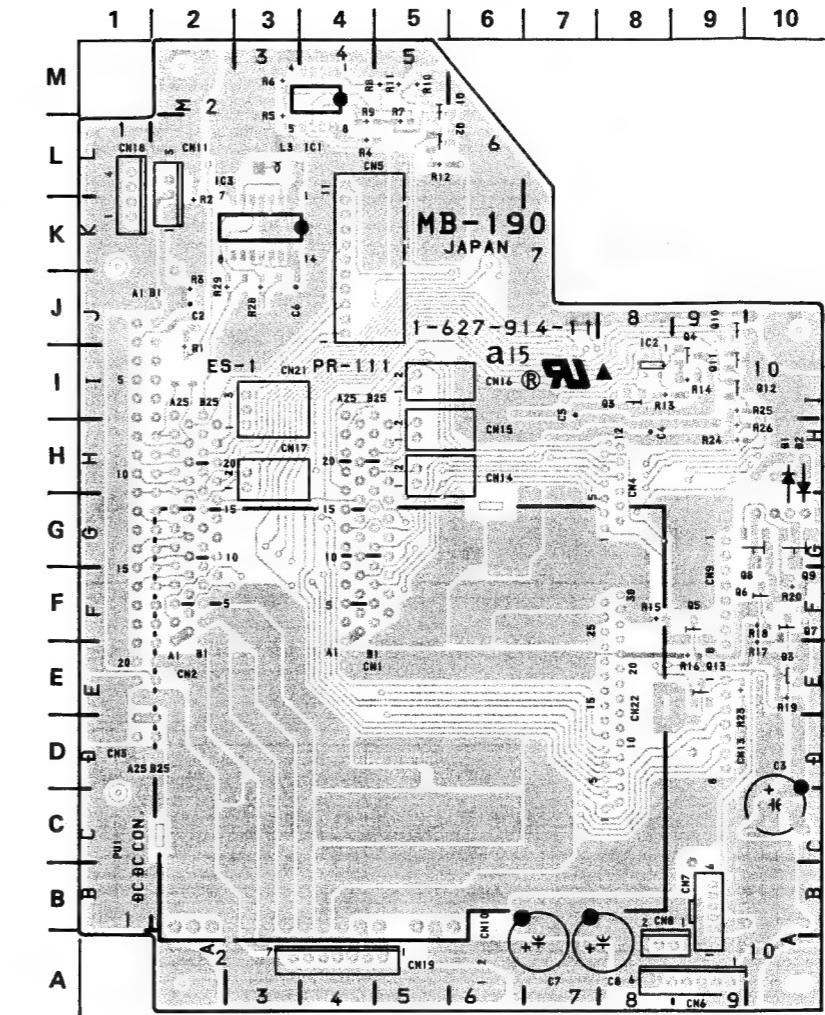
IC1 M-4
 IC2 I-8
 IC3 K-3

PU1 B-2

Q1 M-5
 Q2 L-5
 Q3 I-8
 Q4 I-9
 Q5 E-9
 Q6 F-10
 Q7 F-10
 Q8 G-10
 Q9 G-10
 Q10 J-9
 Q11 I-9
 Q12 I-9



1-627-914-11 COMPONENT SIDE



1-627-914-11 SOLDERING SIDE

MB-190 (1-627-914-11,12)

CN1 G-4
 CN2 G-2
 CN3 G-1
 CN4 H-7
 CN5 K-4
 CN6 A-4
 CN7 B-9
 CN8 A-8
 CN9 F-9
 CN10 A-6
 CN11 L-2
 CN13 D-9
 CN14 H-5
 CN15 H-5
 CN16 I-5
 CN17 H-3
 CN18 L-1
 CN19 A-4
 CN21 I-3
 CN22 E-7

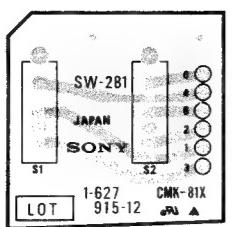
D1 H-10
 D2 H-10
 D3 E-10

IC1 M-4
 IC2 I-8
 IC3 K-3

PU1 B-2

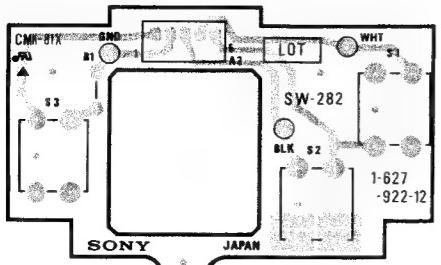
Q1 M-5
 Q2 L-5
 Q3 I-8
 Q4 I-9
 Q5 E-9
 Q6 F-10
 Q7 F-10
 Q8 G-10
 Q9 G-10
 Q10 J-9
 Q11 I-9
 Q12 I-9

SW-281 BOARD



1-627-915 at 11:32 COMMITTEE ON CIVIL

SW-282 BOARD



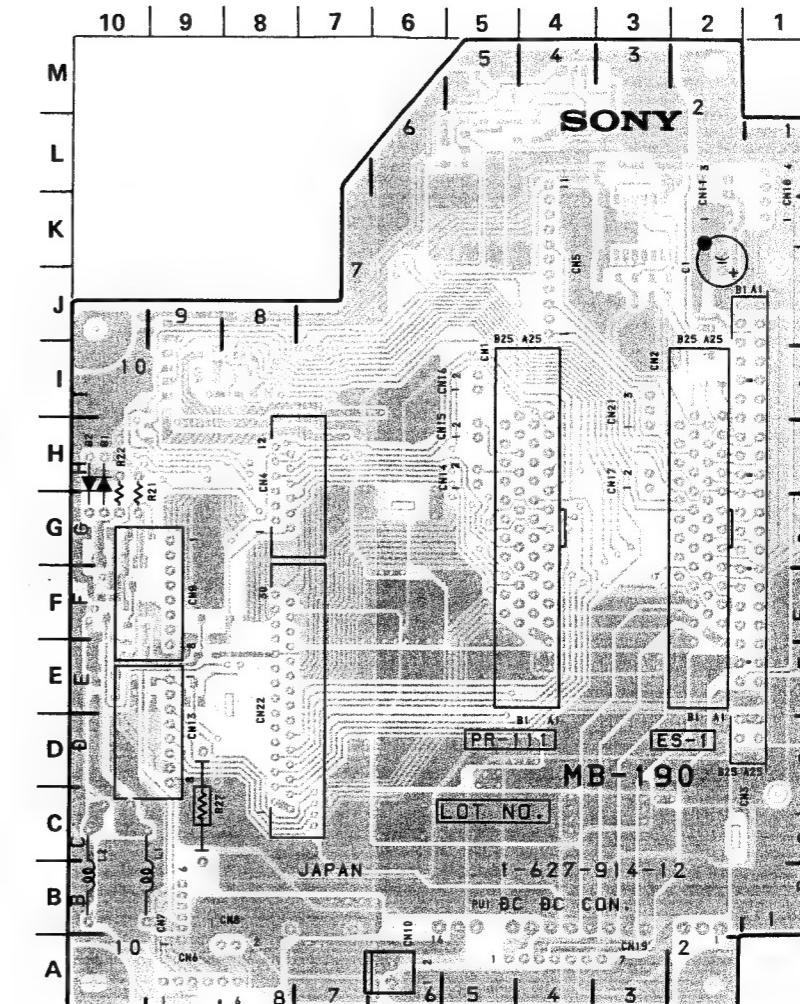
1627-922-11, 12 COMPONENT SIDE

MB-190 BOARD

Ser .No . 10251- (UC)
30151- (J)
40351- (EK)

MB-190 (1-627-914-11,12)

CN1	G-4
CN2	G-2
CN3	G-1
CN4	H-7
CN5	K-4
CN6	A-4
CN7	B-9
CN8	A-8
CN9	F-9
CN10	A-6
CN11	L-2
CN13	D-9
CN14	H-5
CN15	H-5
CN16	I-5
CN17	H-3
CN18	L-1
CN19	A-4
CN21	I-3
CN22	E-7
D1	H-10
D2	H-10
D3	E-10
IC1	M-4
IC2	I-8
IC3	K-3
PU1	B-2
Q1	M-5
Q2	L-5
Q3	I-8
Q4	I-9
Q5	E-9
Q6	F-10
Q7	F-10
Q8	G-10
Q9	G-10
Q10	J-9
Q11	I-9
Q12	I-9



COMPARISON **TABLE**

MB-190 BOARD

Ser. No. 10251-	(UC)
30151-	(J)
40351-	(EK)

MB-190
SW-281, SW-282 FRAME MB-190
SW-281, SW-282 FRAME

MB-190 (1-627-914-11,12)

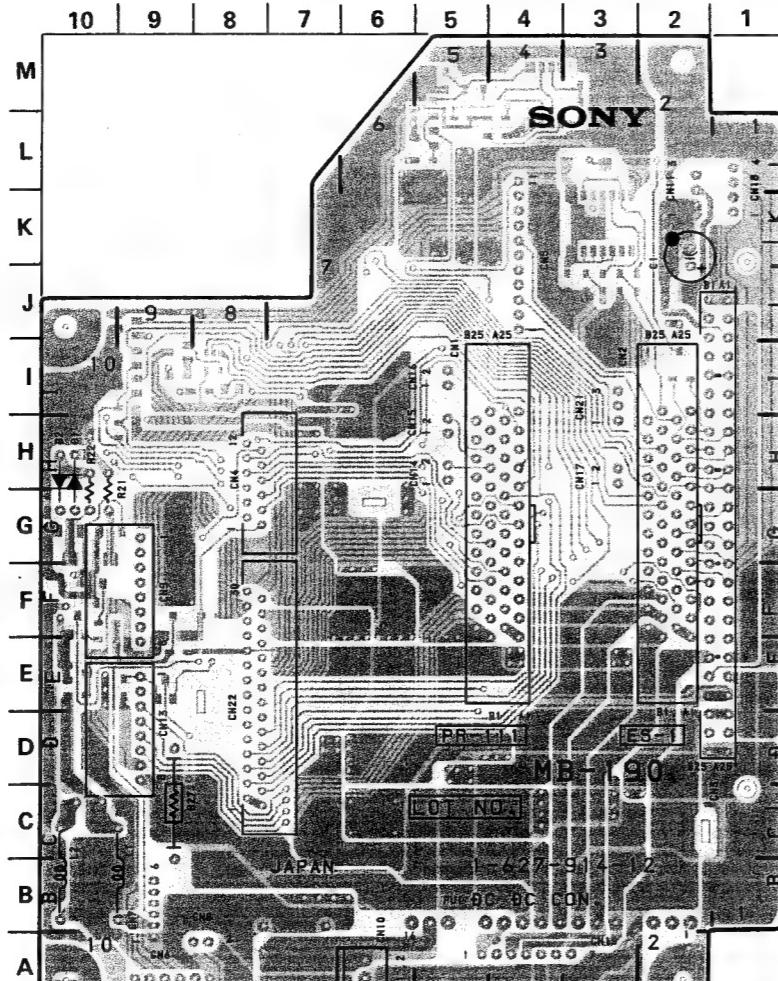
CN1 G-4
CN2 G-2
CN3 G-1
CN4 H-7
CN5 K-4
CN6 A-4
CN7 B-9
CN8 A-8
CN9 F-9
CN10 A-6
CN11 L-2
CN13 D-9
CN14 H-5
CN15 H-5
CN16 I-5
CN17 H-3
CN18 L-1
CN19 A-4
CN21 I-3
CN22 E-7

D1 H-10
D2 H-10
D3 E-10

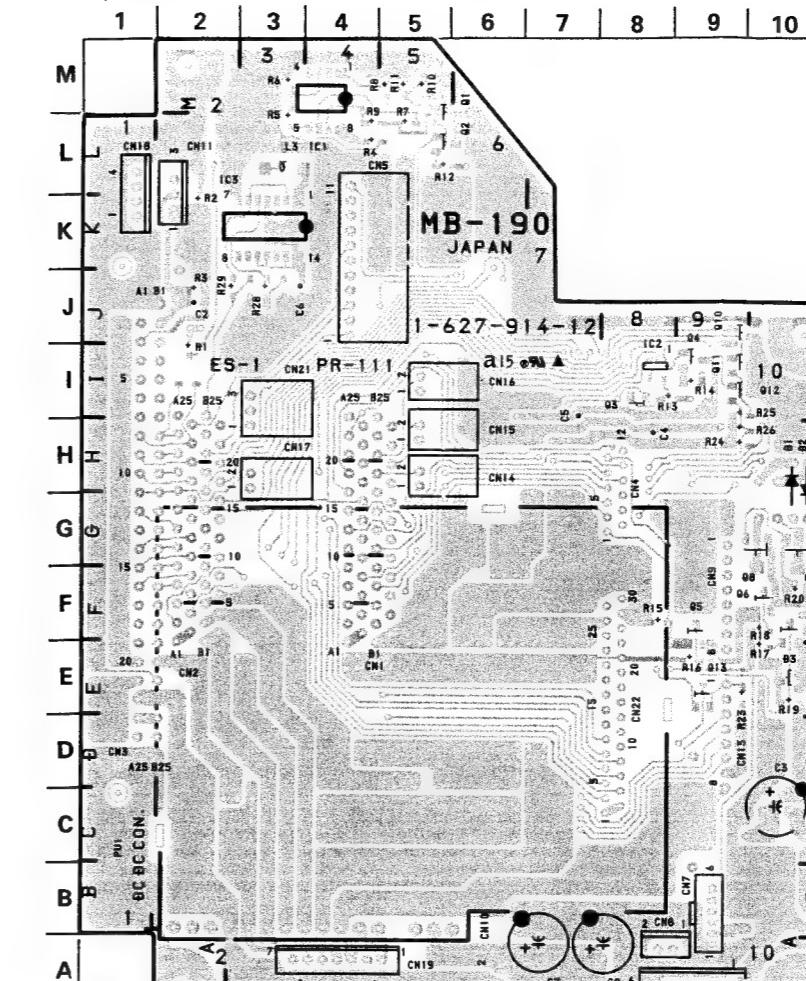
IC1 M-4
IC2 I-8
IC3 K-3

PU1 B-2

Q1 M-5
Q2 L-5
Q3 I-8
Q4 I-9
Q5 E-9
Q6 F-10
Q7 F-10
Q8 G-10
Q9 G-10
Q10 J-9
Q11 I-9
Q12 I-9



1-627-914-12 COMPONENT SIDE



1-627-914-12 SOLDERING SIDE

MB-190 (1-627-914-11,12)

CN1 G-4
CN2 G-2
CN3 G-1
CN4 H-7
CN5 K-4
CN6 A-4
CN7 B-9
CN8 A-8
CN9 F-9
CN10 A-6
CN11 L-2
CN13 D-9
CN14 H-5
CN15 H-5
CN16 I-5
CN17 H-3
CN18 L-1
CN19 A-4
CN21 I-3
CN22 E-7

D1 H-10
D2 H-10
D3 E-10

IC1 M-4
IC2 I-8
IC3 K-3

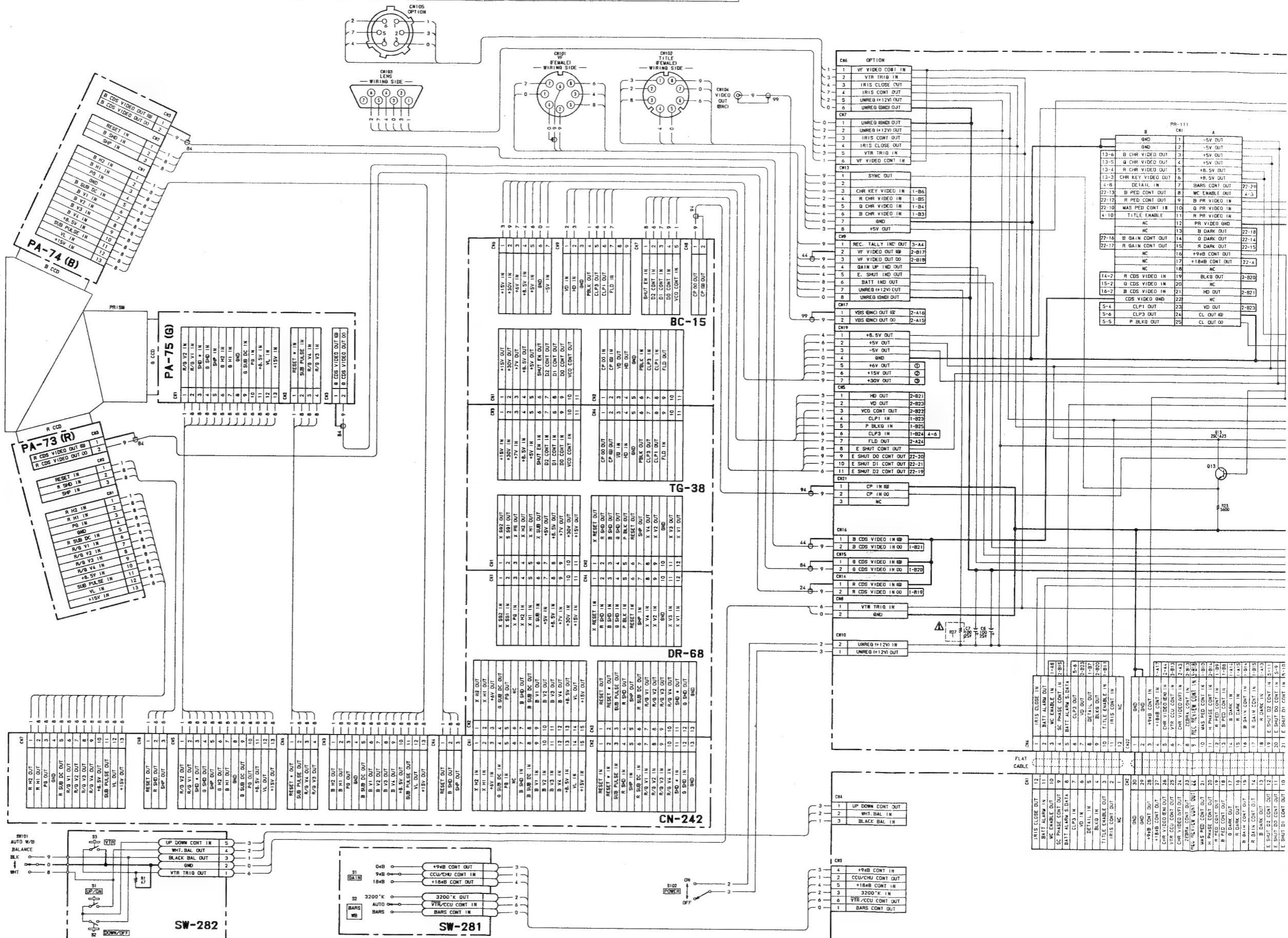
PU1 B-2

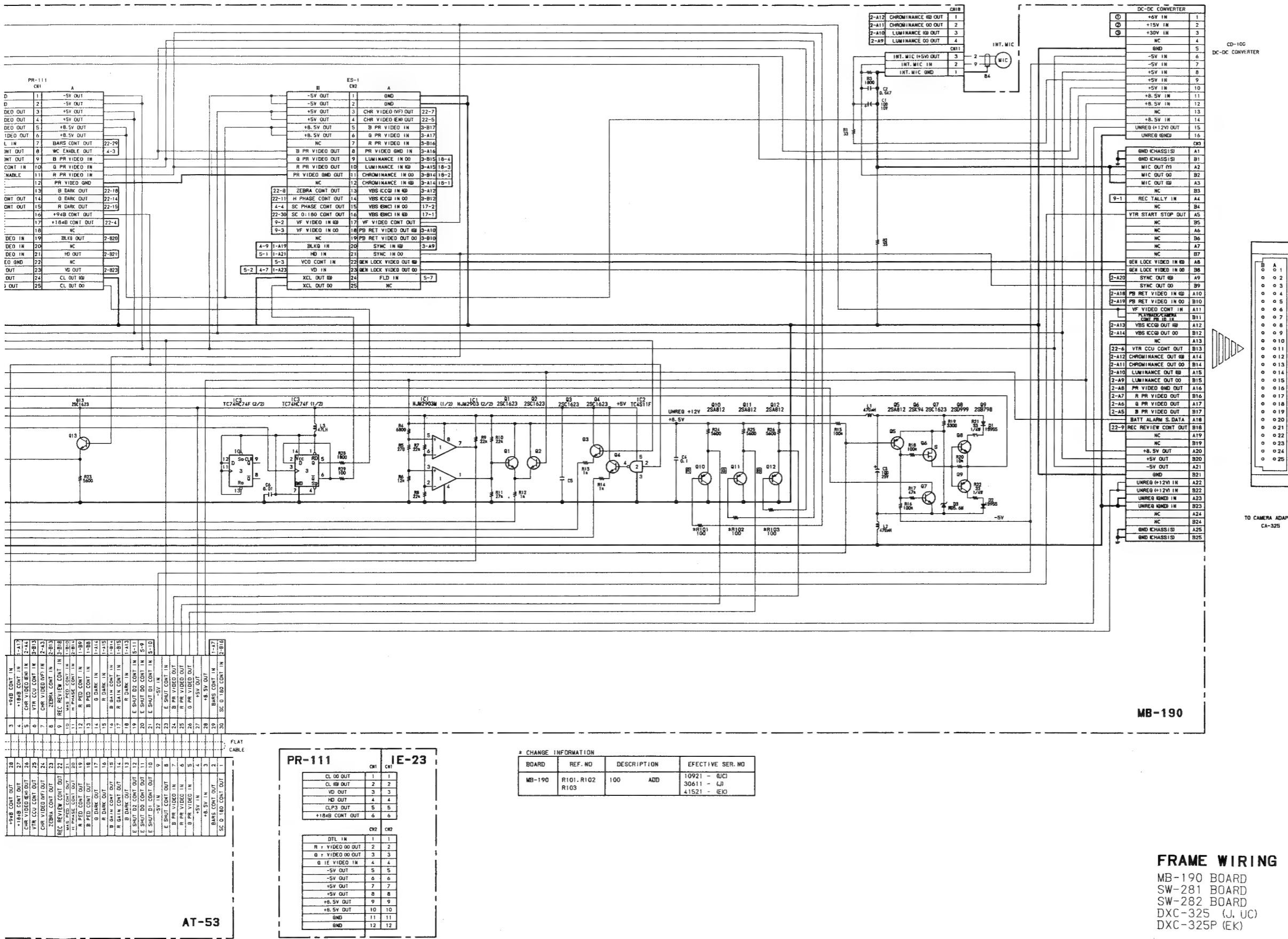
Q1 M-5
Q2 L-5
Q3 I-8
Q4 I-9
Q5 E-9
Q6 F-10
Q7 F-10
Q8 G-10
Q9 G-10
Q10 J-9
Q11 I-9
Q12 I-9

DXC-32 (J, UC)
DXC-32P (EK)

C-43 (b)

C-44 (b)





FRAME WIRING
 MB-190 BOARD
 SW-281 BOARD
 SW-282 BOARD
 DXC-325 (J, UC)
 DXC-325P (EK)

SECTION D SPARE PARTS

D-1. PARTS INFORMATION

1. Safety Related Component Warning

- Components identified by shading marked with ! on the schematic diagrams, exploded views and electrical spare parts list are critical to safe operation. Replace these components with Sony parts whose parts numbers appear as shown in this manual or in service manual supplements published by Sony.
2. Replacement Parts supplied from Sony Parts Center will sometimes have different shape and outside view from the parts which actually in use. This is due to "accommodating the improved parts and/or engineering changes" or "standardization of genuine parts." This manual's exploded view and electrical spare parts lists are indicating the parts numbers of "the standardized genuine parts at present." Regarding engineering parts and diagrams changes in our engineering department, refer SONY service bulletins and service manual supplements.
3. The parts marked with "S" in the SP column of the exploded views and electrical spare parts list are normally required for routine service work. Orders for parts marked with "O" will be processed, but allow for additional delivery time.
4. Item with no parts number and/or no description are not stocked because they are seldom required for routine service.

5. Abbreviation

REF. No.	DESCRIPTION	REF. No.	DESCRIPTION	REF. No.	DESCRIPTION
C	CAPACITOR	IC	IC	RP	RESISTOR BLOCK
CN	CONNECTOR	J	JACK	RV	VARIABLE RESISTOR
CV	VARIABLE CAPACITOR	L	INDUCTOR	S	SWITCH
D	DIODE	LV	VARIABLE INDUCTOR	T	TRANSFORMER
DL	DELAY LINE	Q	TRANSISTOR	X	OSCILLATOR
FL	FILTER	R	RESISTOR		

All capacitors are in micro farads unless otherwise specified.

All inductors are in micro henries unless otherwise specified.

All resistors are in ohms.

D-2. SCREWS

+B Bzn-N	
SIZE	Parts No.
2 x 3	772-00
x 4	772-10
x 5	772-20
x 6	772-30
x 8	772-40
x 10	772-50
x 12	772-60
x 14	772-70
x 16	772-80
x 20	-
2.6 x 3	775-00
x 4	775-10
x 5	775-20
x 6	773-95
x 8	775-40
x 10	775-50
x 12	775-60
x 14	775-70
x 16	775-80
x 20	775-90

+B Bzn-N	
SIZE	Parts No.
3 x 3	544-09
x 4	545-09
x 5	546-09
x 6	547-09
x 8	548-09
x 10	549-09
x 12	550-09
x 14	551-09
x 16	552-09
x 20	553-09
x 30	555-09
4 x 4	558-09
x 5	559-09
x 6	560-09
x 8	561-09
x 10	562-09
x 12	563-09
x 14	564-09
x 16	565-09
x 20	566-09
5 x 8	574-09
x 10	575-09
x 12	576-09
x 14	577-09
x 16	578-09
x 20	579-09

+B Cr-N	
SIZE	Parts No.
3 x 3	544-04
x 4	545-04
x 5	546-04
x 6	547-04
x 8	548-04
x 10	549-04
x 12	550-04
x 14	551-04
x 16	552-04
x 20	553-04
4 x 4	558-04
x 5	559-04
x 6	560-04
x 8	561-04
x 10	562-04
x 12	563-04
x 14	564-04
x 16	565-04
x 20	566-04
5 x 8	574-04
x 10	575-04
x 12	576-04
x 14	577-04
x 16	578-04
x 20	579-04

+K Cr-N	
SIZE	Parts No.
3 x 4	245-04
x 5	246-04
x 6	247-04
x 8	248-04
x 10	249-04
x 12	250-04
x 14	251-04
x 16	252-04
x 20	253-04
4 x 6	260-04
x 8	261-04
x 10	262-04
x 12	263-04
x 14	264-04
x 16	265-04
x 20	266-04

+B Cr-N	
SIZE	Parts No.
2 x 3	772-08
x 4	772-18
x 5	771-06
x 6	772-38
x 8	772-48
x 10	772-58
x 12	772-68
x 14	772-78
x 16	772-88
x 20	-
2.6 x 3	775-08
x 4	773-86
x 5	770-87
x 6	770-67
x 8	770-99
x 10	773-87
x 12	775-68
x 14	775-78
x 16	775-88
x 20	773-91

PRECISION +K Bzn-N	
SIZE	Parts No.
1.7 x 1.8	—
x 2	450-28
x 2.2	—
x 2.5	450-48
x 2.8	—
x 3	450-58
x 3.5	—
x 4	450-78
x 4.5	—
x 5	450-98
x 5.5	—
x 6	—
2 x 2	452-08
x 2.2	452-88
x 2.5	452-48
x 2.8	—
x 3	452-18
x 3.5	452-98
x 4	452-28
x 4.5	—
x 5	452-38
x 5.5	—
x 6	452-58
x 7	452-68
x 8	452-78
2.6 x 3.5	—
x 4	—
x 4.5	454-28
x 5	454-38
x 5.5	—
x 6	—
x 7	—
x 8	—

PRECISION +P Bzn-N	
SIZE	Parts No.
1.7 x 1.6	552-18
x 1.8	—
x 2	552-28
x 2.2	—
x 2.5	552-08
x 2.8	—
x 3	552-38
x 3.5	552-78
x 4	552-48
x 4.5	—
x 5	552-58
x 5.5	—
x 6	—
2 x 1.8	554-38
x 2	553-18
x 2.2	—
x 2.5	553-28
x 2.8	554-58
x 3	553-38
x 3.5	554-18
x 4	553-48
x 4.5	553-58
x 5	554-28
x 5.5	—
x 6	553-68
x 7	553-88
x 8	553-98
x 10	553-78
2.6 x 2.8	556-08
x 3	—
x 3.5	556-28
x 4	556-38
x 4.5	556-48
x 5	556-58
x 5.5	—
x 6	556-78
x 7	—
x 8	—
x 9	—
x 10	—

HEXAGON SET SCREW (FLAT) SNCM6-PD	
SIZE	Parts No.
2 x 2.5	731-08
2 x 3	732-08
2 x 4	733-08
2 x 5	—
2 x 6	—
2.6 x 3	737-08
2.6 x 4	738-08
2.6 x 5	739-08
2.6 x 6	740-08

BOLT, HEXAGON SOCKET SNCM6 BZn-N4	
SIZE	Parts No.
3 x 4	401-04
3 x 5	402-04
3 x 6	403-04
3 x 8	404-04
3 x 10	405-04
3 x 12	406-04
3 x 14	407-04
3 x 16	408-04
3 x 20	410-04
4 x 5	417-04
4 x 6	418-04
4 x 8	419-04
4 x 10	420-04
4 x 12	421-04
4 x 14	422-04
4 x 16	423-04
4 x 20	425-04
4 x 25	427-04
5 x 8	434-04
5 x 10	435-04
5 x 12	436-04
5 x 14	437-04
5 x 16	438-04
5 x 20	440-04
5 x 25	442-04
5 x 30	444-04
5 x 50	447-04
6 x 10	452-04
6 x 12	453-04
6 x 14	454-04
6 x 16	455-04
6 x 20	457-04
6 x 25	459-04
6 x 30	461-04
6 x 35	463-04
6 x 40	465-04
6 x 45	466-04
6 x 55	468-04
8 x 12	470-04
8 x 14	471-04
8 x 16	472-04
8 x 20	473-04
8 x 25	474-04
8 x 30	475-04
8 x 35	476-04
8 x 40	477-04
8 x 45	478-04
8 x 50	479-04

D-3. EXPLODED VIEW

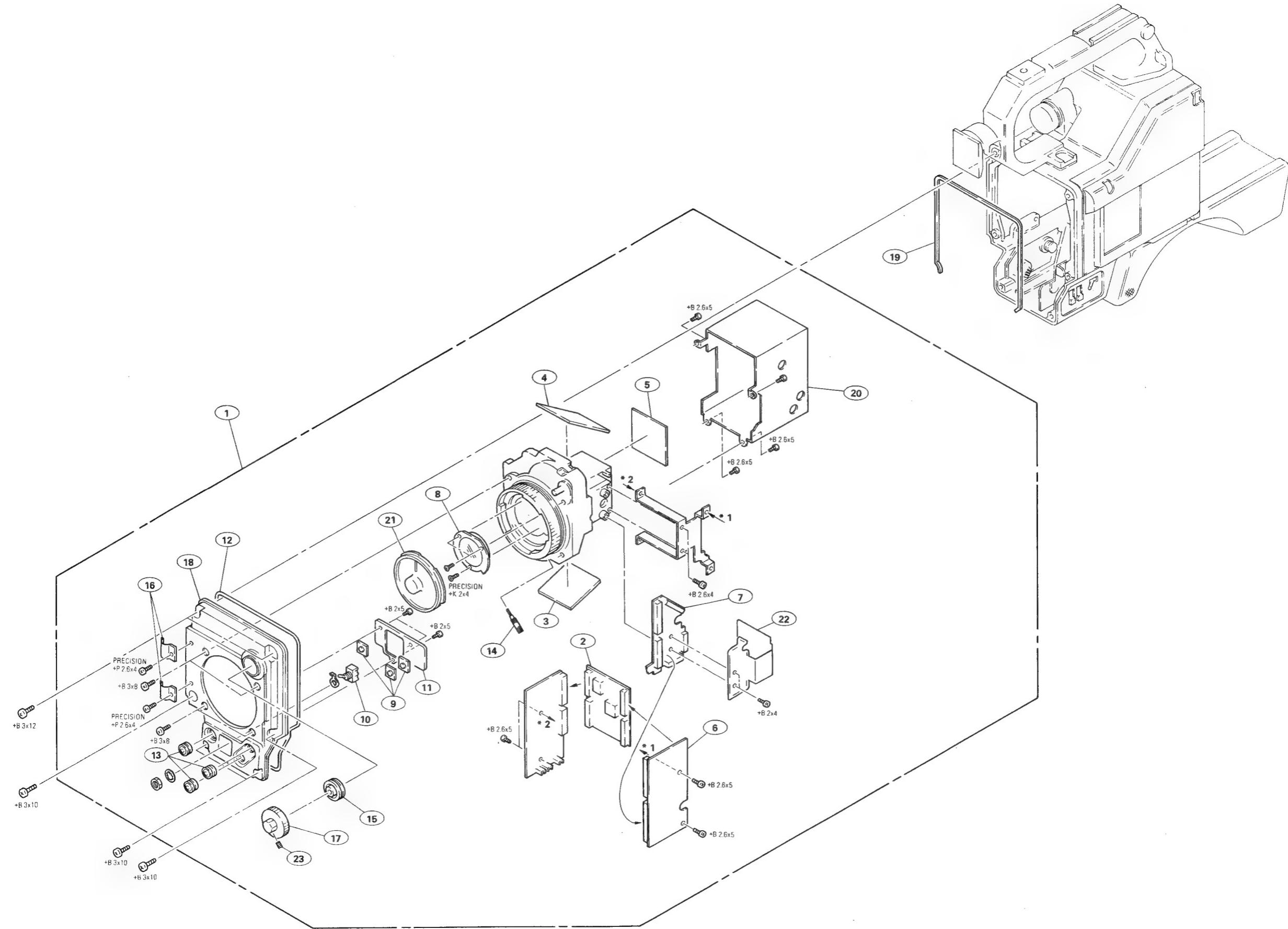
[CCD BLOCK]

No.	Parts No.	SP	Description
1	A-7575-123-A	s	CCD UNIT ASSY (N)
	A-7575-124-A	s	CCD UNIT ASSY (P)
2	A-7513-829-A	o	MOUNTED CIRCUIT BOARD (N) "TG-38" Ser No. 10001 to 11720(UC) 30001 to 30840(J) 40001 to 42530(EK)
	A-7515-001-A	o	MOUNTED CIRCUIT BOARD (N) "TG-38" Ser No. 11721 and higher(UC) 30841 and higher(J) 42531 and higher(EK)
	A-7513-830-A	o	MOUNTED CIRCUIT BOARD (P) "TG-38" Ser No. 10001 to 11720(UC) 30001 to 30840(J) 40001 to 42530(EK)
	A-7513-998-A	o	MOUNTED CIRCUIT BOARD (P) "TG-38" Ser No. 11721 and higher(UC) 30841 and higher(J) 42531 and higher(EK)
3	A-7513-831-A	s	MOUNTED CIRCUIT BOARD "PA-73"
4	A-7513-832-A	s	MOUNTED CIRCUIT BOARD "PA-74"
5	A-7513-833-A	s	MOUNTED CIRCUIT BOARD "PA-75"
6	A-7513-835-A	s	MOUNTED CIRCUIT BOARD "DR-68" Ser No. 10001 to 11720(UC) 30001 to 30840(J) 40001 to 42530(EK)
	A-7513-997-A	o	MOUNTED CIRCUIT BOARD "DR-68" Ser No. 11721 and higher(UC) 30841 and higher(J) 42531 and higher(EK)
7	A-7513-836-A	s	MOUNTED CIRCUIT BOARD "CN-242"
8	1-547-301-11	o	FILTER UNIT, OPTICAL Ser No. 10001 to 10570(UC) 40001 to 40920(EK)
	1-547-301-12	o	FILTER UNIT, OPTICAL Ser No. 10571 and higher(UC) 40921 and higher(EK)
9	1-553-739-21	s	SWITCH, KEY BOARD "VTR" "UP/ON"
10	1-554-486-00	s	SWITCH, TOGGLE "AUTO W/B BAL"
11	1-627-922-11	s	PRINTED CIRCUIT BOARD "SW-282"
12	3-672-253-11	o	RUBBER, CONDUCTIVE
13	3-676-244-00	s	COVER, SWITCH
14	3-678-629-00	s	LEVER, MOUNT
15	3-678-632-00	o	PACKING, KNOB
16	3-678-684-00	o	HOLDER, CABLE
17	3-699-047-01	s	KNOB, FILTER
18	3-699-106-01	o	PANEL, FRONT
19	3-699-112-01	o	LABEL, RED
20	3-699-133-01	o	COVER, BLOCK SHIELD
21	3-699-144-01	s	CAP, MOUNT
22	3-699-146-01	o	PLATE, BLOCK SHIELD
23	3-701-506-01	s	SET SCREW, DOUBLE POINT 3x4

CCD BLOCK

CCD BLOCK

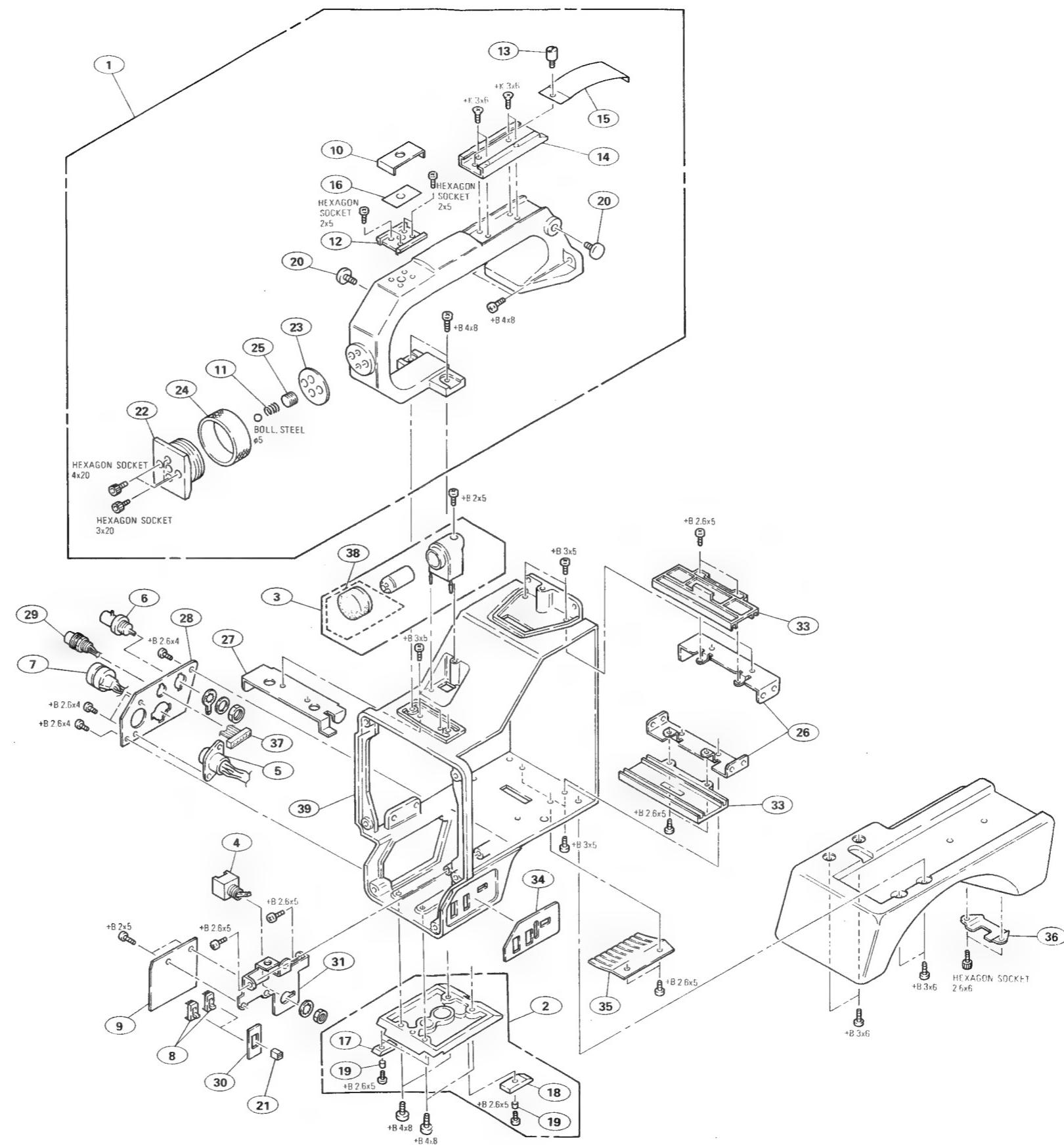
CCD BLOCK



CHASSIS(1) BLOCK

CHASSIS(1) BLOCK

CHASSIS(1) BLOCK



D-7

D-8

DXC-325(UC)
DXC-325P(EK)

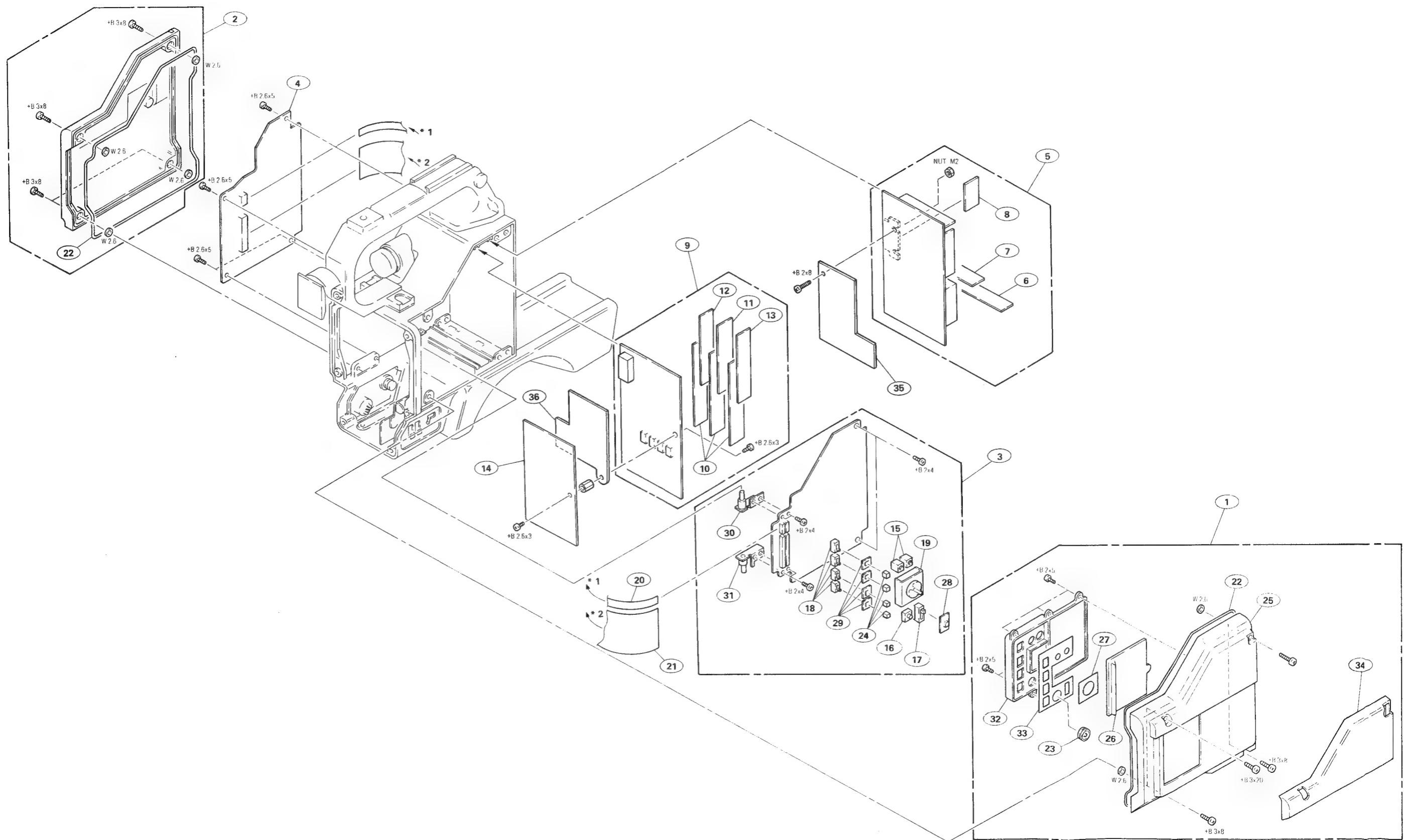
[CHASSIS (1) BLOCK]

No.	Parts No.	SP Description
1	A-7420-144-A	o HANDLE ASSY
2	X-3664-212-2	s SHOE ASSY (B), T
3	1-542-112-11	s MICROPHONE (C-2025)
4	1-553-972-00	s SWITCH, TOGGLE "POWER"
5	1-561-320-00	s SOCKET, DIN 8P "VF"
6	1-561-781-41	s CONNECTOR, BNC "VIDEO OUT"
7	1-565-653-11	s CONNECTOR, SMALL TYPE 8P "TITLE"
8	1-570-854-11	s SWITCH, SLIDE "GAIN" "BARS WB"
9	1-627-915-11	o PRINTED CIRCUIT BOARD "SW-281"
10	2-277-468-01	s PLATE, ORNAMENTAL, CAMERA SHOE (B)
11	3-641-622-00	s SPRING, COMPRESSION
12	3-657-700-00	o BRACKET ACCESSORY
13	3-664-213-00	o SCREW, STOPPER
14	3-664-218-00	o SHOE
15	3-664-228-00	o PLATE, SPRING
16	3-672-213-00	s SHEET, ADHESIVE
17	3-675-963-02	s FOOT, FRONT, RUBBER
18	3-675-964-01	s FOOT, REAR, RUBBER
19	3-675-965-01	s SPACER
20	3-676-379-00	s SCREW, BUSHING (M5)
21	3-680-605-00	o CAP, SLIDE
22	3-682-718-02	o SHOE, VF SLIDE
23	3-682-758-01	o SPACER
24	3-682-759-01	o RING, LOCK
25	3-682-760-01	o SCREW (M7-0.75), ADJUSTMENT
26	3-699-110-01	o BRACKET (A)
27	3-699-111-01	o BRACKET (B)
28	3-699-113-02	o PLATE, CONNECTOR
29	1-562-222-41	s RECEPTACLE, 6P FEMALE
30	3-699-126-01	o PLATE, BLIND
31	3-699-129-01	o STOPPER, SW
33	3-699-131-01	o GUIDE, PC BOARD
34	3-699-132-01	o LABEL, SW
35	3-699-145-01	o PLATE, GROUND
36	3-699-176-01	o STOPPER (2)
37	1-562-151-11	o PLUG, HOUSING 6P
38	X-2536-714-1	o WINDSCREEN ASSY
39	3-699-104-02	o CABINET

[CHASSIS (2) BLOCK]

No.	Parts No.	SP	Description	No.	Parts No.	SP	Description
1	A-7420-141-B	o	PLATE (RIGHT) (N) ASSY, SIDE	16	1-554-303-11	s	SWITCH, PUSH "REC REVIEW"
	A-7420-142-A	o	PLATE (RIGHT) (P) ASSY, SIDE	17	1-554-364-00	s	SWITCH, SLIDE "DISP CHG"
	Ser No. 40001 to 40150			18	1-570-865-11	s	SWITCH, SLIDE "SC" "SHUTTER" "ABC" "ZEBRA"
	A-7420-142-B	o	PLATE (RIGHT) (P) ASSY, SIDE	19	1-571-678-11	s	SWITCH, ROTARY "SHUTTER SPEED"
2	Ser No. 40151 and higher			20	1-574-144-11	o	WIRE, FLAT TYPE (10 CORE)
2	A-7420-143-A	o	PLATE (LEFT) ASSY, SIDE	21	1-574-145-11	o	WIRE, FLAT TYPE (30 CORE)
3	A-7513-837-A	o	MOUNTED CIRCUIT BOARD "AT-53"	22	3-672-253-11	o	RUBBER, CONDUCTIVE
4	A-7513-838-A	o	MOUNTED CIRCUIT BOARD "MB-190"	23	3-676-244-00	s	COVER, SWITCH
5	A-7513-839-A	o	MOUNTED CIRCUIT BOARD (N) "ES-1"	24	3-680-605-00	o	CAP, SLIDE
	A-7513-843-A	o	MOUNTED CIRCUIT BOARD (P) "ES-1"	25	3-699-107-01	o	PLATE (RIGHT), SIDE
6	A-7513-840-A	o	MOUNTED CIRCUIT BOARD (N) "MX-18"	26	3-699-121-01	o	PLATE, SLIDE
	A-7513-844-A	o	MOUNTED CIRCUIT BOARD (P) "MX-18"		Ser No. 40001 to 40150(EK)		
7	A-7513-841-A	o	MOUNTED CIRCUIT BOARD (N) "CM-22"	27	3-699-121-02	o	PLATE, SLIDE
	A-7513-845-A	o	MOUNTED CIRCUIT BOARD (P) "CM-22"		Ser No. 10001 and higher(UC) 40151 and higher(EK)		
8	A-7513-842-A	o	MOUNTED CIRCUIT BOARD "BKG-4" (NTSC ONLY)	28	3-699-125-01	s	KNOB, DISPCHG
9	A-7513-846-A	o	MOUNTED CIRCUIT BOARD (N) "PR-111"	29	3-699-126-01	o	PLATE, BLIND
	A-7513-847-A	o	MOUNTED CIRCUIT BOARD (P) "PR-111"	30	3-699-127-01	o	BRACKET (A), AT
10	A-7513-848-A	o	MOUNTED CIRCUIT BOARD "PR-109"		Ser No. 10001 to 10570(UC) 40001 to 40920(EK)		
11	A-7513-849-A	o	MOUNTED CIRCUIT BOARD "VA-70R"	31	3-699-170-01	o	BRACKET (UPPER), AT
12	A-7513-850-A	o	MOUNTED CIRCUIT BOARD "VA-70G"		Ser No. 10571 and higher(UC) 30361 and higher(J) 40921 and higher(EK)		
13	A-7513-851-A	o	MOUNTED CIRCUIT BOARD "VA-70B"		3-699-128-01	o	BRACKET (B), AT
14	A-7513-853-A	o	MOUNTED CIRCUIT BOARD (N) "IE-23"		Ser No. 10001 to 10570(UC) 40001 to 40920(EK)		
	A-7513-854-A	o	MOUNTED CIRCUIT BOARD (P) "IE-23"	32	3-699-171-01	o	BRACKET (LOWER), AT
15	1-237-605-11	s	RES, VER, METAL 10K "PHASE H" "PHASE SC"	33	Ser No. 10571 and higher(UC) 40921 and higher(EK)		
				34	3-699-135-01	o	PLATE, SW
				35	3-699-136-01	o	LABEL (A), SW
					3-699-137-01	s	PAD (C), SIDE
					3-699-178-01	o	PLATE, SHIELD ES
					Ser NO. 42081 and higher(EK)		
				36	3-699-179-01	o	PLATE, SHIELD IE
					Ser No. 11271 and higher(UC) 30811 and higher(J) 42081 and higher(EK)		

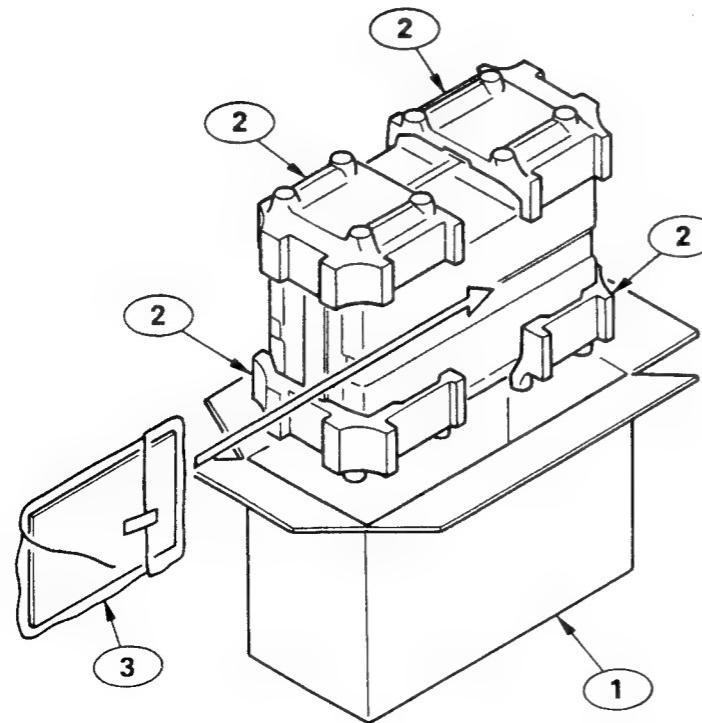
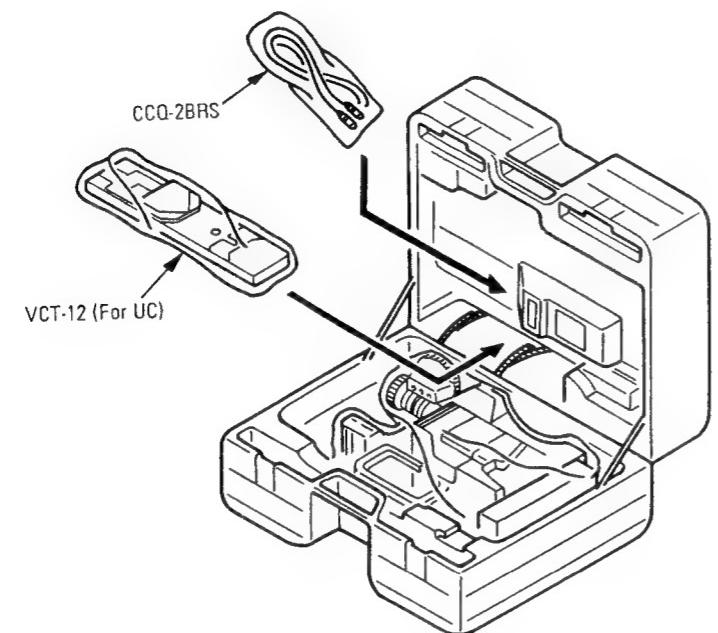
CHASSIS(2) BLOCK



D-4. PACKING MATERIAL AND ACCESSORIES

No. Parts No. SP Description

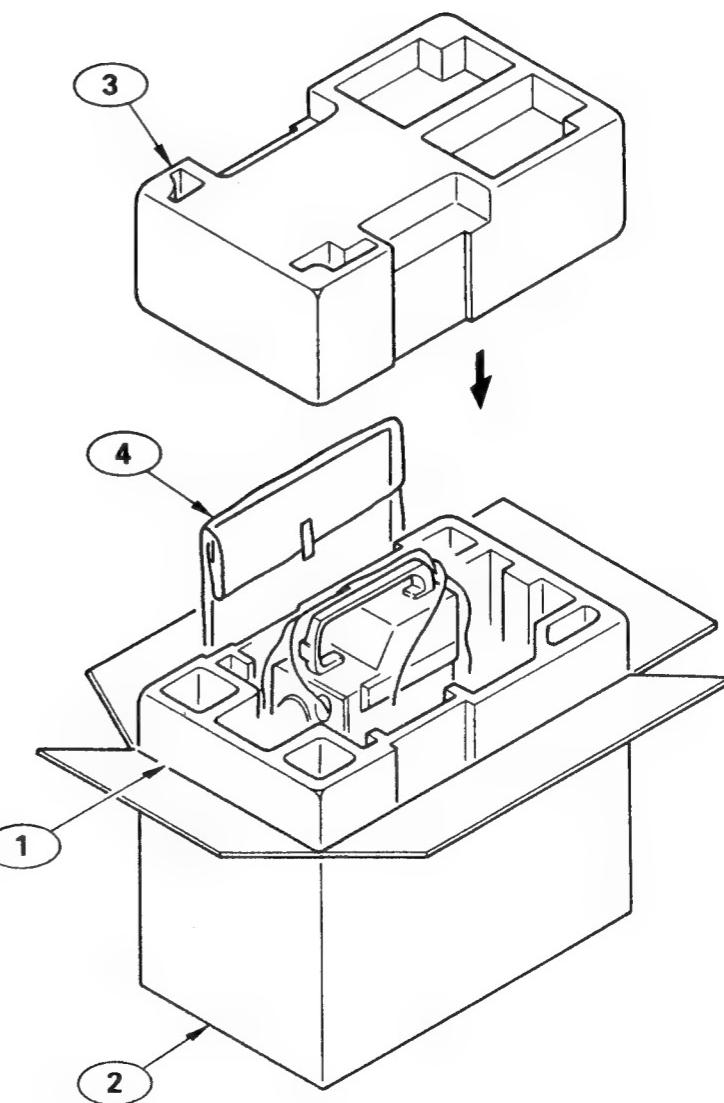
1	3-699-158-01	o CARTON, INDIVIDUAL DXC-325K(J,UC)
	3-699-159-01	o CARTON, INDIVIDUAL DXC-325PK(EK)
	3-699-160-01	o CARTON, INDIVIDUAL DXC-325L(J,UC)
	3-699-161-01	o CARTON, INDIVIDUAL DXC-325PL(EK)
2	3-699-162-01	o CUSHION
3	3-701-630-01	o BAG, POLY
	3-786-608-11	s MANUAL, INSTRUCTION



D-13

No. Parts No. SP Description

1	3-699-154-01	o CUSHION (REAR)
2	3-699-155-01	o CARTON, INDIVIDUAL DXC-325PH(EK)
3	3-699-156-01	o CARTON, INDIVIDUAL DXC-325H(J,UC)
4	3-699-157-01	o CUTION (FRONT)
	3-701-630-01	o BAG, POLY
	3-786-608-01	s MANUAL, INSTRUCTION(J,UC)
	3-786-608-31	s MANUAL, INSTRUCTION(UC)
	3-786-608-41	s MANUAL, INSTRUCTION(EK)
	3-786-608-51	s MANUAL, INSTRUCTION(EK)



D-14

DXC-325 (J,UC)
DXC-325 P(EK)

D-5. ELECTRICAL PARTS

Part No.	SP	Description	Part No.	SP	Description
CAPACITOR, CHIP TANTALUM					
0.1uF - 47uF	+-10%/-20%	6.3V/10V/16V/20V/25V/35V	1pF - 4pF	CH	+-0.25pF 50V
1-135-070-00	s	CAP, CHIP TANTALUM 0.1 10% 35V	6pF - 8pF	CH	+-0.5pF 50V
1-135-071-21	s	CAP, CHIP TANTALUM 0.15 10% 35V	10pF - 1000pF	CH	+-5% 50V
1-135-072-21	s	CAP, CHIP TANTALUM 0.22 10% 35V	1500pF - 6800pF	B	+-10% 50V
1-135-073-00	s	CAP, CHIP TANTALUM 0.33 10% 35V	0.01uF - 0.015uF	B	+-10% 50V
1-135-083-00	s	CAP, CHIP TANTALUM 0.47 10% 25V	0.033uF - 0.047uF	F	+80/-20% 50V
			0.068uF - 0.1uF	F	+80/-20% 25V
1-135-074-21	s	CAP, CHIP TANTALUM 0.47 10% 35V	1-163-083-00	s	CAP, CHIP CERAMIC 1pF +-0.25pF 5
1-135-087-21	s	CAP, CHIP TANTALUM 0.68 10% 20V	1-163-085-00	s	CAP, CHIP CERAMIC 2pF +-0.25pF 5
1-135-075-21	s	CAP, CHIP TANTALUM 0.68 10% 35V	1-163-087-00	s	CAP, CHIP CERAMIC 4pF +-0.25pF 5
1-135-091-21	s	CAP, CHIP TANTALUM 1.0 10% 16V	1-163-089-00	s	CAP, CHIP CERAMIC 6pF +-0.5pF 50
1-135-076-21	s	CAP, CHIP TANTALUM 1.0 10% 35V	1-163-091-00	s	CAP, CHIP CERAMIC 8pF +-0.5pF 50
1-135-084-21	s	CAP, CHIP TANTALUM 1.5 10% 25V	1-163-093-00	s	CAP, CHIP CERAMIC 10pF 5% 50V
1-135-077-21	s	CAP, CHIP TANTALUM 1.5 10% 35V	1-163-097-00	s	CAP, CHIP CERAMIC 15pF 5% 50V
1-135-088-21	s	CAP, CHIP TANTALUM 2.2 10% 20V	1-163-101-00	s	CAP, CHIP CERAMIC 22pF 5% 50V
1-135-078-21	s	CAP, CHIP TANTALUM 2.2 10% 35V	1-163-105-00	s	CAP, CHIP CERAMIC 33pF 5% 50V
1-135-092-21	s	CAP, CHIP TANTALUM 3.3 10% 16V	1-163-109-00	s	CAP, CHIP CERAMIC 47pF 5% 50V
1-135-079-21	s	CAP, CHIP TANTALUM 3.3 10% 35V	1-163-113-00	s	CAP, CHIP CERAMIC 68pF 5% 50V
1-135-096-21	s	CAP, CHIP TANTALUM 4.7 10% 10V	1-163-117-00	s	CAP, CHIP CERAMIC 100pF 5% 50V
1-135-085-21	s	CAP, CHIP TANTALUM 4.7 10% 25V	1-163-121-00	s	CAP, CHIP CERAMIC 150pF 5% 50V
1-135-100-21	s	CAP, CHIP TANTALUM 6.8 10% 6.3V	1-163-125-00	s	CAP, CHIP CERAMIC 220pF 5% 50V
1-135-089-21	s	CAP, CHIP TANTALUM 6.8 10% 20V	1-163-129-00	s	CAP, CHIP CERAMIC 330pF 5% 50V
1-135-093-21	s	CAP, CHIP TANTALUM 10 10% 16V	1-163-133-00	s	CAP, CHIP CERAMIC 470pF 5% 50V
1-135-097-21	s	CAP, CHIP TANTALUM 15 10% 10V	1-163-137-00	s	CAP, CHIP CERAMIC 680pF 5% 50V
1-135-101-21	s	CAP, CHIP TANTALUM 22 10% 6.3V	1-163-141-00	s	CAP, CHIP CERAMIC 1000pF 5% 50V
1-135-098-21	s	CAP, CHIP TANTALUM 47 10% 6.3V	1-163-145-00	s	CAP, CHIP CERAMIC 1500pF 10% 50V
			1-163-013-00	s	CAP, CHIP CERAMIC 2200pF 10% 50V
			1-163-015-00	s	CAP, CHIP CERAMIC 3300pF 10% 50V
			1-163-017-00	s	CAP, CHIP CERAMIC 4700pF 10% 50V
			1-163-019-00	s	CAP, CHIP CERAMIC 6800pF 10% 50V
			1-163-021-00	s	CAP, CHIP CERAMIC 0.01 10% 50V
			1-163-023-00	s	CAP, CHIP CERAMIC 0.015 10% 50V
			1-163-034-00	s	CAP, CHIP CERAMIC 0.033 50V
			1-163-035-00	s	CAP, CHIP CERAMIC 0.047 50V
			1-163-036-00	s	CAP, CHIP CERAMIC 0.068 50V
			1-163-038-00	s	CAP, CHIP CERAMIC 0.1 50V

Part No. SP Description**RESISTOR, CHIP**

1/10W

0 - 3.3M (E12) +-5% 1/10W

1-216-295-00	s	RES, CHIP	0	5%	1/10W
1-216-298-00	s	RES, CHIP	2.2	5%	1/10W
1-216-302-00	s	RES, CHIP	2.7	5%	1/10W
1-216-304-00	s	RES, CHIP	3.3	5%	1/10W
1-216-306-00	s	RES, CHIP	3.9	5%	1/10W
1-216-308-00	s	RES, CHIP	4.7	5%	1/10W
1-216-309-00	s	RES, CHIP	5.6	5%	1/10W
1-216-311-00	s	RES, CHIP	6.8	5%	1/10W
1-216-313-00	s	RES, CHIP	8.2	5%	1/10W
1-216-001-00	s	RES, CHIP	10	5%	1/10W
1-216-003-00	s	RES, CHIP	12	5%	1/10W
1-216-005-00	s	RES, CHIP	15	5%	1/10W
1-216-007-00	s	RES, CHIP	18	5%	1/10W
1-216-009-00	s	RES, CHIP	22	5%	1/10W
1-216-011-00	s	RES, CHIP	27	5%	1/10W
1-216-013-00	s	RES, CHIP	33	5%	1/10W
1-216-015-00	s	RES, CHIP	39	5%	1/10W
1-216-017-00	s	RES, CHIP	47	5%	1/10W
1-216-019-00	s	RES, CHIP	56	5%	1/10W
1-216-021-00	s	RES, CHIP	68	5%	1/10W
1-216-023-00	s	RES, CHIP	82	5%	1/10W
1-216-025-00	s	RES, CHIP	100	5%	1/10W
1-216-027-00	s	RES, CHIP	120	5%	1/10W
1-216-029-00	s	RES, CHIP	150	5%	1/10W
1-216-031-00	s	RES, CHIP	180	5%	1/10W
1-216-033-00	s	RES, CHIP	220	5%	1/10W
1-216-035-00	s	RES, CHIP	270	5%	1/10W
1-216-037-00	s	RES, CHIP	330	5%	1/10W
1-216-039-00	s	RES, CHIP	390	5%	1/10W
1-216-041-00	s	RES, CHIP	470	5%	1/10W
1-216-043-00	s	RES, CHIP	560	5%	1/10W
1-216-045-00	s	RES, CHIP	680	5%	1/10W
1-216-047-00	s	RES, CHIP	820	5%	1/10W
1-216-049-00	s	RES, CHIP	1k	5%	1/10W
1-216-051-00	s	RES, CHIP	1.2k	5%	1/10W
1-216-053-00	s	RES, CHIP	1.5k	5%	1/10W
1-216-055-00	s	RES, CHIP	1.8k	5%	1/10W
1-216-057-00	s	RES, CHIP	2.2k	5%	1/10W
1-216-059-00	s	RES, CHIP	2.7k	5%	1/10W
1-216-061-00	s	RES, CHIP	3.3k	5%	1/10W
1-216-063-00	s	RES, CHIP	3.9k	5%	1/10W
1-216-065-00	s	RES, CHIP	4.7k	5%	1/10W
1-216-067-00	s	RES, CHIP	5.6k	5%	1/10W
1-216-069-00	s	RES, CHIP	6.8k	5%	1/10W
1-216-071-00	s	RES, CHIP	8.2k	5%	1/10W
1-216-073-00	s	RES, CHIP	10k	5%	1/10W
1-216-075-00	s	RES, CHIP	12k	5%	1/10W
1-216-077-00	s	RES, CHIP	15k	5%	1/10W
1-216-079-00	s	RES, CHIP	18k	5%	1/10W
1-216-081-00	s	RES, CHIP	22k	5%	1/10W

Part No. SP Description

1-216-083-00	s	RES, CHIP	27k	5%	1/10W
1-216-085-00	s	RES, CHIP	33k	5%	1/10W
1-216-087-00	s	RES, CHIP	39k	5%	1/10W
1-216-089-00	s	RES, CHIP	47k	5%	1/10W
1-216-091-00	s	RES, CHIP	56k	5%	1/10W
1-216-093-00	s	RES, CHIP	68k	5%	1/10W
1-216-095-00	s	RES, CHIP	82k	5%	1/10W
1-216-097-00	s	RES, CHIP	100k	5%	1/10W
1-216-099-00	s	RES, CHIP	120k	5%	1/10W
1-216-101-00	s	RES, CHIP	150k	5%	1/10W
1-216-103-00	s	RES, CHIP	180k	5%	1/10W
1-216-105-00	s	RES, CHIP	220k	5%	1/10W
1-216-107-00	s	RES, CHIP	270k	5%	1/10W
1-216-109-00	s	RES, CHIP	330k	5%	1/10W
1-216-111-00	s	RES, CHIP	390k	5%	1/10W
1-216-113-00	s	RES, CHIP	470k	5%	1/10W
1-216-115-00	s	RES, CHIP	560k	5%	1/10W
1-216-117-00	s	RES, CHIP	680k	5%	1/10W
1-216-119-00	s	RES, CHIP	820k	5%	1/10W
1-216-121-00	s	RES, CHIP	1.0M	5%	1/10W
1-216-123-00	s	RES, CHIP	1.2M	5%	1/10W
1-216-125-00	s	RES, CHIP	1.5M	5%	1/10W
1-216-127-00	s	RES, CHIP	1.8M	5%	1/10W
1-216-129-00	s	RES, CHIP	2.2M	5%	1/10W
1-216-131-00	s	RES, CHIP	2.7M	5%	1/10W
1-216-133-00	s	RES, CHIP	3.3M	5%	1/10W

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
AT-53 BOARD			D1	8-719-100-03 s	1S2835
A-7513-837-A	o MOUNTED CIRCUIT BOARD "AT-53"		D2	8-719-100-03 s	1S2835
C1	1-124-638-11 s ELECT 22uF 20% 10V		D3	8-719-100-03 s	1S2835
C8	1-135-159-21 s TANTAL, CHIP 10MF 20% 16V		D4	8-719-100-03 s	1S2835
C10	1-135-155-21 s TANTAL, CHIP 4.7MF 20% 10V		D5	8-719-100-05 s	1S2837
C11	1-135-155-21 s TANTAL, CHIP 4.7MF 20% 10V		D6	8-719-101-23 s	1SS123
C13	1-124-234-00 s ELECT 22uF 20% 16V		D7	8-719-100-05 s	1S2837
C14	1-126-153-11 s ELECT 22uF 20% 6.3V		D8	8-719-100-05 s	1S2837
C15	1-131-365-00 s TANTALUM 10uF 10% 20V		D9	8-719-100-05 s	1S2837
C16	1-135-125-21 s TANTALUM, CHIP 33uF 20% 10V		D10	8-719-100-05 s	1S2837
C17	1-131-365-00 s TANTALUM 10uF 10% 20V		D11	8-719-100-05 s	1S2837
C18	1-123-661-00 s ELECT 100uF 20% 6.3V		D12	8-719-100-03 s	1S2835
C20	1-135-155-21 s TANTAL, CHIP 4.7MF 20% 10V		D13	8-719-105-93 s	RD5.6M-B1
C21	1-124-638-11 s ELECT 22uF 20% 10V		D14	8-719-100-03 s	1S2835
C22	1-131-365-00 s TANTALUM 10uF 10% 20V		D16	8-719-100-05 s	1S2837
C24	1-124-638-11 s ELECT 22uF 20% 10V		D18	8-719-101-23 s	1SS123
C25	1-124-638-11 s ELECT 22uF 20% 10V		D19	8-719-100-03 s	1S2835
C26	1-135-155-21 s TANTAL, CHIP 4.7MF 20% 10V		D20	8-719-100-05 s	1S2837
C27	1-135-155-21 s TANTAL, CHIP 4.7MF 20% 10V		D21	8-719-100-05 s	1S2837
C28	1-131-375-00 s TANTALUM 4.7uF 10% 10V		D22	8-719-100-03 s	1S2835
C29	1-131-375-00 s TANTALUM 4.7uF 10% 10V		D23	8-719-100-05 s	1S2837
C32	1-124-255-00 s ELECT 1uF 20% 50V		D24	8-719-100-03 s	1S2835
C33	1-124-589-11 s ELECT 47uF 20% 16V		D25	8-719-100-05 s	1S2837
C34	1-124-638-11 s ELECT 22uF 20% 10V		D26	8-719-100-03 s	1S2835
C35	1-123-611-00 s ELECT 1uF 20% 50V		D27	8-719-100-05 s	1S2837
C36	1-123-611-00 s ELECT 1uF 20% 50V		IC1	8-759-103-25 s	UPD4053BG: NEC
C37	1-130-489-00 s MYLAR 0.033uF 5% 50V		IC2	8-759-101-12 s	UPC311G2: NEC
C38	1-164-161-11 s CERAMIC, CHIP 0.0022MF 10% 50V		IC3	8-759-700-07 s	NJM2903M: JRC
C39	1-123-611-00 s ELECT 1uF 20% 50V		IC4	8-759-906-54 s	TL064CNS: TOSHIBA
C41	1-124-638-11 s ELECT 22uF 20% 10V		IC5	8-759-208-11 s	TC4053BFHB: TOSHIBA
C42	1-131-365-00 s TANTALUM 10uF 10% 20V		IC6	8-759-908-17 s	TL082CPS: TI
C43	1-126-157-11 s ELECT 10uF 20% 16V		IC7	8-759-906-54 s	TL064CNS: TI
C44	1-124-638-11 s ELECT 22uF 20% 10V		IC8	8-759-200-82 s	TC4069UBF: TOSHIBA
C45	1-124-638-11 s ELECT 22uF 20% 10V		IC9	8-759-303-31 s	HD44860B42: HITACHI
C53	1-126-153-11 s ELECT 22uF 20% 6.3V		IC10	8-759-208-07 s	TC4051BFHB: TOSHIBA
C54	1-126-153-11 s ELECT 22uF 20% 6.3V		IC11	8-759-208-07 s	TC4051BFHB: TOSHIBA
C60	1-131-379-00 s TANTALUM 22uF 10% 10V		IC12	8-759-906-54 s	TL064CNS: TI
C65	1-126-157-11 s ELECT 10 20% 16V		IC13	8-759-906-54 s	TL064CNS: TI
C66	1-125-443-11 s DOUBLE LAYERS 0.047F 5.5V		IC14	8-759-906-54 s	TL064CNS: TI
C67	1-135-091-00 s TANTALUN, CHIP 1uF 10% 16V		IC15	8-759-208-11 s	TC4053BFHB: TOSHIBA
CN1	1-566-512-11 s CONNECTOR, FPC (ZIF) 12P		IC16	8-759-400-89 s	MN1237AD: MATSUSHITA
CN2	1-565-210-11 s CONNECTOR, FPC (ZIF) 30P		IC17	8-759-200-67 s	TC4001BF: TOSHIBA
CN3	1-506-485-11 o CONNECTOR, 6P, MALE		IC18	8-759-200-82 s	TC4069UBF: TOSHIBA
CN4	1-506-468-11 o CONNECTOR, 3P, MALE		IC19	8-759-208-11 s	TC4053BFHB: TOSHIBA
			IC20	8-759-209-90 s	TC4S71F: TOSHIBA
			IC21	8-759-209-15 s	TC4SU69F: TOSHIBA
					Ser.No. 42081 and higher

Ref. No. Part No. SP Description

L1 1-408-789-21 s CHIP 100 μ H

Q4 8-729-100-66 s 2SC1623-L6
 Q5 8-729-402-19 s XN6501
 Q6 8-729-402-19 s XN6501
 Q9 8-729-100-66 s 2SC1623-L6
 Q10 8-729-402-16 s XN4608

Q11 8-729-402-16 s XN4608
 Q12 8-729-109-41 s 2SK94-X1
 Q13 8-729-100-66 s 2SC1623-L6
 Q14 8-729-100-66 s 2SC1623-L6
 Q15 8-729-100-66 s 2SC1623-L6
 Q16 8-729-102-65 s 2SC2757-T32
 Q17 8-729-102-65 s 2SC2757-T32
 Q18 8-729-100-75 s 2SA812-M5
 Q19 8-729-100-66 s 2SC1623-L6
 Q20 8-729-100-66 s 2SC1623-L6

Q27 8-729-100-66 s 2SC1623-L6
 Q28 8-729-100-75 s 2SA812-M5
 Q29 8-729-100-75 s 2SA812-M5
 Q30 8-729-100-75 s 2SA812-M5
 Q31 8-729-100-66 s 2SC1623-L6
 Q32 8-729-100-66 s 2SC1623-L6
 Q33 8-729-100-66 s 2SC1623-L6
 Q34 8-729-100-66 s 2SC1623-L6
 Q35 8-729-100-66 s 2SC1623-L6
 Q36 8-729-100-66 s 2SC1623-L6

R161 1-216-748-11 s METAL, CHIP 39K 1% 1/10W

RB1 1-231-387-00 s RESISTOR BLOCK

RV1 1-237-603-11 s METAL 2.2K
 RV2 1-237-606-11 s METAL 22K
 RV3 1-237-603-11 s METAL 2.2K
 RV4 1-237-609-11 s METAL 220K
 RV5 1-237-518-21 s METAL 10K

RV6 1-237-518-21 s METAL 10K

S1 1-553-510-00 s SWITCH, SLIDE
 S2 1-570-865-11 s SWITCH, SLIDE
 S3 1-570-865-11 s SWITCH, SLIDE
 S4 1-570-865-11 s SWITCH, SLIDE
 S5 1-570-865-11 s SWITCH, SLIDE

S6 1-554-303-21 s SWITCH, KEY BOARD
 S7 1-554-364-00 s SWITCH, SLIDE
 S8 1-571-678-11 s SWITCH, ROTARY
 S9 1-553-510-00 s SWITCH, SLIDE

X1 1-527-532-00 s OSCILLATOR, CERAMIC

Ref. No. Part No. SP Description

BC-15 BOARD

A-7513-834-A o MOUNTED CIRCUIT BOARD
"BC-15"

C1 1-124-120-11 s ELECT 220 μ F 20% 25V
 C2 1-126-176-11 s ELECT 220 μ F 20% 10V

CN1 1-566-257-11 o CONNECTOR, BOARD TO BOARD
11P
 CN2 1-566-257-11 o CONNECTOR, BOARD TO BOARD
11P
 CN5 1-562-156-11 o HOUSING, CONNECTOR 11P
 1-564-026-00 s CONTACT, FEMALE, AWG24-30
 CN6 1-562-152-11 o HOUSING, CONNECTOR 7P
 1-564-026-00 s CONTACT, FEMALE, AWG24-30
 CN7 1-562-738-11 o HOUSING, CONNECTOR 5P

CN8 1-562-735-11 o HOUSING, CONNECTOR 2P
 1-564-026-00 s CONTACT, FEMALE, AWG24-30
 CN21 1-562-148-11 o HOUSING 3P

CN-242 BOARD

A-7513-836-A o MOUNTED CIRCUIT BOARD
"CN-242"

C4 1-135-125-21 s TANTALUM, CHIP 33 μ F 20% 10V
 C15 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V

CN1 1-563-688-21 o CONNECTOR, BOARD TO BOARD
15P
 CN2 1-563-686-21 o CONNECTOR, BOARD TO BOARD
13P
 CN3 1-565-160-11 o PIN, CONNECTOR (ANGLE) 13P
 CN4 1-565-150-11 o PIN, CONNECTOR (ANGLE) 3P
 CN5 1-565-160-11 o PIN, CONNECTOR (ANGLE) 13P
 CN6 1-565-151-11 o PIN, CONNECTOR (ANGLE) 4P
 CN7 1-565-160-11 o PIN, CONNECTOR (ANGLE) 13P
 CN8 1-565-150-11 o PIN, CONNECTOR (ANGLE) 3P

D1 8-719-100-05 s 1S2837
 D2 8-719-100-05 s 1S2837
 D3 8-719-100-05 s 1S2837

IC1 8-759-204-96 s TC74HC04F: TOSHIBA
 IC2 8-759-204-96 s TC74HC04F: TOSHIBA

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
DR-68 BOARD			IC1	8-759-205-00	s TC74HC14F: TOSHIBA
A-7513-835-A o MOUNTED CIRCUIT BOARD	"DR-68"		IC2	8-759-204-98	s TC74HC08F: TOSHIBA
Ser.No 10001 ~ 11720 (UC)	30001 ~ 30840 (J)		IC3	8-759-100-95	s UPC324G2: NEC
40001 ~ 42530 (EK)			IC4	8-752-031-03	s CXA1065M: SONY
A-7513-997-A o MOUNTED CIRCUIT BOARD	"DR-68"		IC5	8-752-031-03	s CXA1065M: SONY
Ser.No 11721 ~ (UC)	30841 ~ (J)		L1	1-408-783-00	s CHIP 33µH
42531 ~ (EK)			L2	1-408-797-11	s CHIP 470µH
			L3	1-408-783-00	s CHIP 33µH
C1 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V			Q1	8-729-104-06	s 2SD999-CK
C4 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V			Q2	8-729-100-66	s 2SC1623-L6
C5 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V			Q3	8-729-216-22	s 2SA812-M5
C7 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V			Q4	8-729-216-22	s 2SA812-M5
C8 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V			Q5	8-729-100-66	s 2SC1623-L6
C9 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V			Q6	8-729-100-66	s 2SC1623-L6
C10 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V			Q7	8-729-100-66	s 2SC1623-L6
C11 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V			Q8	8-729-100-66	s 2SC1623-L6
C13 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V			Q9	8-729-100-66	s 2SC1623-L6
C14 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V			Q10	8-729-100-66	s 2SC1623-L6
C22 1-163-119-00 s CERAMIC, CHIP 120PF 5% 50V			Q11	8-729-216-22	s 2SA812-M5
C23 1-135-138-11 s TANTAL, CHIP 10MF 20% 20V			Q12	8-729-112-65	s 2SA1462
C24 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V			Q13	8-729-110-67	s NTM2369
C29 1-135-159-21 s TANTAL, CHIP 10MF 20% 10V			Q14	8-729-100-66	s 2SC1623-L6
C35 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V					
C36 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V			R1	1-216-677-11	s METAL, CHIP 12K 0.5% 1/10W
C37 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V			R2	1-216-686-11	s METAL, CHIP 30K 0.5% 1/10W
C38 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V			R36	1-216-649-11	s METAL, CHIP 820 0.5% 1/10W
C39 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V			R37	1-216-635-11	s METAL, CHIP 220 0.5% 1/10W
C40 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V					
C41 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V			RV1	1-230-873-11	s METAL 47K
C42 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V			RV2	1-230-873-11	s METAL 47K
			RV3	1-230-873-11	s METAL 47K
			RV4	1-230-867-11	s METAL 1K
CN1 1-566-257-11 o CONNECTOR, BOARD TO BOARD		11P			
CN2 1-566-277-21 o CONNECTOR, BOARD TO BOARD		15P			
CN3 1-566-275-21 o CONNECTOR, BOARD TO BOARD		13P			
CN4 1-566-258-11 o CONNECTOR, BOARD TO BOARD		12P			
D1 8-719-101-23 s 1SS123					
D2 8-719-420-24 s MA123					
D3 8-719-420-23 s MA122					
D4 8-719-420-24 s MA123					
D5 8-719-420-23 s MA122					
D6 8-719-100-03 s 1S2835					
D7 8-719-100-03 s 1S2835					
D8 8-719-100-03 s 1S2835					
D9 8-719-100-03 s 1S2835					
D11 8-719-100-03 s 1S2835					
D12 8-719-100-03 s 1S2835					

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
ES-1 BOARD	A-7513-843-A	o MOUNTED CIRCUIT BOARD "ES-1"(CM-22, MX-18)	D1	8-719-100-03	s 1S2835
			D2	8-719-100-03	s 1S2835
				Ser.No. 42081 and higher	
C1	1-124-589-11	s ELECT 47uF 20% 16V	DL1	1-415-306-00	s 340nS
C2	1-126-154-11	s ELECT 47uF 20% 6.3V			
C3	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V	FL1	1-235-181-00	s BAND PASS 4.43MHz
C4	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V			
C5	1-163-086-00	s CERAMIC, CHIP 3PF 50V			
C6	1-126-157-11	s ELECT 10uF 20% 16V	IC1	8-759-933-79	s UA711CNS: FSC
C7	1-163-088-00	s CERAMIC, CHIP 5PF 50V	IC2	8-759-208-11	s TC4053BFHB: TOSHIBA
C8	1-123-661-00	s ELECT 100uF 20% 6.3V	IC3	8-759-204-57	s TC40H076AF: TOSHIBA
C9	1-124-584-00	s ELECT 100uF 20% 10V	IC4	8-759-200-82	s TC4069UBF: TOSHIBA
C10	1-126-157-11	s ELECT 10uF 20% 16V	IC5	1-807-836-11	s IC,SEP: SONY
C11	1-135-124-21	s TANTALUM, CHIP 22uF 20%	IC6	1-808-513-12	s IB-38: SONY
		10V			Ser.No 41521
C12	1-124-638-11	s ELECT 22uF 20% 10V	IC7	8-759-907-81	s SN74LS221NS: TI
C13	1-124-638-11	s ELECT 22uF 20% 10V	IC8	8-741-134-00	s BX1340: SONY
C14	1-124-589-11	s ELECT 47uF 20% 16V	IC9	1-808-514-11	s IB-37: SONY
C16	1-124-589-11	s ELECT 47uF 20% 16V	IC10	8-757-930-11	s CX7930A: SONY
C18	1-126-157-11	s ELECT 10uF 20% 16V			
C19	1-163-090-00	s CERAMIC, CHIP 7PF 50V	L1	1-408-781-00	s CHIP 22uH
C20	1-124-638-11	s ELECT 22uF 20% 10V	L2	1-408-777-00	s CHIP 10uH
C21	1-126-157-11	s ELECT 10uF 20% 16V	L3	1-408-781-00	s CHIP 22uH
C22	1-126-157-11	s ELECT 10uF 20% 16V	L4	1-408-781-00	s CHIP 22uH
C23	1-123-661-00	s ELECT 100uF 20% 6.3V	L6	1-408-781-00	s CHIP 22uH
C24	1-124-589-11	s ELECT 47uF 20% 16V	L7	1-408-781-00	s CHIP 22uH
C26	1-124-638-11	s ELECT 22uF 20% 10V	L8	1-408-781-00	s CHIP 22uH
C28	1-124-234-00	s ELECT 22uF 20% 16V	L9	1-408-785-21	s CHIP 47uH
C30	1-126-176-11	s ELECT 220uF 20% 10V	L10	1-408-781-00	s CHIP 22uH
C34	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V	L11	1-408-785-21	s CHIP 47uH
C36	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V	L12	1-408-785-21	s CHIP 47uH
C37	1-123-661-00	s ELECT 100uF 20% 6.3V	L13	1-408-783-00	s CHIP 33uH
C38	1-163-099-00	s CERAMIC, CHIP 18PF 5% 50V	L14	1-408-785-21	s CHIP 47uH
C39	1-135-124-21	s TANTALUM, CHIP 22uF 20%	L15	1-408-785-21	s CHIP 47uH
		10V	L16	1-408-785-21	s CHIP 47uH
C42	1-131-381-00	s TANTALUM 47uF 10% 10V	L17	1-408-785-21	s CHIP 47uH
C44	1-126-176-11	s ELECT 220uF 20% 10V	L18	1-408-783-21	s CHIP 33uH
C46	1-126-157-11	s ELECT 10uF 20% 16V	L19	1-408-785-21	s CHIP 47uH
C56	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V	L20	1-408-785-21	s CHIP 47uH
C60	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V	L101	1-408-777-00	s CHIP 10uH
C61	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V	L201	1-408-785-21	s CHIP 47uH
C63	1-163-245-00	s CERAMIC, CHIP 56PF 5% 50V			
C64	1-163-241-11	s CERAMIC, CHIP 39PF 5% 50V			
C70	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V			
C203	1-126-157-11	s ELECT 10uF 20% 16V	LV1	1-408-844-00	s 22uH
CN1	1-565-780-11	o CONNECTOR,TX(P.L.) (PC BOARD)50P			
CP1	1-577-183-11	s OSCILLATOR, CRYSTAL			

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
Q1	8-729-402-16	s XN4608	R47	1-216-665-11	s METAL, CHIP 3.9K 0.5% 1/10W
Q2	8-729-402-19	s XN6501	R74	1-216-649-11	s METAL, CHIP 820 0.5% 1/10W
Q3	8-729-100-75	s 2SA812-M5	R78	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W
Q4	8-729-402-19	s XN6501	R79	1-216-649-11	s METAL, CHIP 820 0.5% 1/10W
Q5	8-729-402-78	s XN6401	R85	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
Q6	8-729-100-66	s 2SC1623-L6	R87	1-216-677-11	s METAL, CHIP 12K 0.5% 1/10W
Q7	8-729-102-65	s 2SC2757-T32	R108	1-216-661-11	s METAL, CHIP 2.7K 0.5% 1/10W
Q8	8-729-100-75	s 2SA812-M5	R112	1-249-421-11	s CARBON 2.2K 5% 1/4W
Q9	8-729-402-19	s XN6501	R113	1-249-428-11	s CARBON 8.2K 5% 1/4W
Q10	8-729-100-66	s 2SC1623-L6	R201	1-249-417-11	s CARBON 1K 5% 1/4W (EK) Ser No. 40001 to 41520
Q11	8-729-100-66	s 2SC1623-L6	R202	1-249-429-11	s CARBON 10K 5% 1/4W (EK) Ser No. 40001 to 41520
Q12	8-729-402-19	s XN6501	RV1	1-230-523-11	s METAL 10K
Q13	8-729-402-19	s XN6501	RV2	1-230-519-11	s METAL 470
Q14	8-729-100-75	s 2SA812-M5	RV3	1-238-221-11	s METAL 2.2K
Q15	8-729-100-66	s 2SC1623-L6	RV4	1-238-219-11	s METAL 470
Q20	8-729-109-41	s 2SK94-X1	RV6	1-230-522-11	s METAL 4.7K
R1	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W	RV7	1-230-521-11	s METAL 2.2K
R2	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W	CM-22 BOARD		
R4	1-216-677-11	s METAL, CHIP 12K 0.5% 1/10W	A-7513-845-A	o MOUNTED CIRCUIT BOARD	"CM-22"
R6	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W	C2	1-135-124-21	s TANTALUM, CHIP 22uF 20% 10V
R7	1-216-668-11	s METAL, CHIP 5.1K 0.5% 1/10W	C5	1-135-124-21	s TANTALUM, CHIP 22uF 20% 10V
R8	1-216-683-11	s METAL, CHIP 22K 0.5% 1/10W	C7	1-163-114-00	s CERAMIC, CHIP 75PF 5% 50V
R9	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W	C9	1-163-114-00	s CERAMIC, CHIP 75PF 5% 50V
R10	1-216-677-11	s METAL, CHIP 12K 0.5% 1/10W	CN1	1-564-549-11	o PIN, BOARD TO BOARD 10P
R11	1-216-644-11	s METAL, CHIP 510 0.5% 1/10W	IC1	8-759-906-59	s CX22017: SONY
R12	1-218-254-11	s METAL CHIP 2.55K 0.50% 1/10W	R2	1-216-637-11	s METAL, CHIP 270 0.5% 1/10W
R13	1-218-259-11	s METAL CHIP 13.7K 0.50% 1/10W	R3	1-216-683-11	s METAL, CHIP 22K 0.5% 1/10W
R14	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W	R4	1-216-677-11	s METAL, CHIP 12K 0.5% 1/10W
R15	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W	R8	1-216-637-11	s METAL, CHIP 270 0.5% 1/10W
R17	1-216-658-11	s METAL, CHIP 2K 0.5% 1/10W	R9	1-216-683-11	s METAL, CHIP 22K 0.5% 1/10W
R21	1-216-624-11	s METAL, CHIP 75 0.5% 1/10W	R10	1-216-677-11	s METAL, CHIP 12K 0.5% 1/10W
R22	1-216-624-11	s METAL, CHIP 75 0.5% 1/10W	R11	1-216-644-11	s METAL, CHIP 510 0.5% 1/10W
R26	1-218-254-11	s METAL CHIP 2.55K 0.50% 1/10W			
R27	1-218-257-11	s METAL CHIP 4.99K 0.50% 1/10W			
R30	1-216-655-11	s METAL, CHIP 1.5K 0.5% 1/10W			
R31	1-216-655-11	s METAL, CHIP 1.5K 0.5% 1/10W			
R33	1-216-658-11	s METAL, CHIP 2K 0.5% 1/10W	Q1	8-729-100-66	s 2SC1623-L6
R37	1-216-658-11	s METAL, CHIP 2K 0.5% 1/10W	Q2	8-729-100-66	s 2SC1623-L6
R44	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W	Q3	8-729-100-66	s 2SC1623-L6
R45	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W			
			R2	1-216-637-11	s METAL, CHIP 270 0.5% 1/10W
			R3	1-216-683-11	s METAL, CHIP 22K 0.5% 1/10W
			R4	1-216-677-11	s METAL, CHIP 12K 0.5% 1/10W
			R8	1-216-637-11	s METAL, CHIP 270 0.5% 1/10W
			R9	1-216-683-11	s METAL, CHIP 22K 0.5% 1/10W
			R10	1-216-677-11	s METAL, CHIP 12K 0.5% 1/10W
			R11	1-216-644-11	s METAL, CHIP 510 0.5% 1/10W

Ref. No. Part No. SP Description

MX-18 BOARD

A-7513-844-A o MOUNTED CIRCUIT BOARD
"MX-18"

C1 1-163-090-00 s CERAMIC, CHIP 7PF 50V
C3 1-163-099-00 s CERAMIC, CHIP 18PF 5% 50V
C11 1-135-124-21 s TANTALUM, CHIP 22uF 20% 10V

CN1 1-566-093-11 o PIN, BOARD TO BOARD 8P
CN2 1-506-592-11 o CONNECOTR, 4P

L1 1-408-795-21 s CHIP 330uH
L2 1-408-795-21 s CHIP 330uH

Q1 8-729-403-31 s XN6435
Q2 8-729-402-16 s XN4608
Q3 8-729-402-19 s XN6501
Q4 8-729-100-66 s 2SC1623-L6
Q5 8-729-402-78 s XN6401

Q6 8-729-402-19 s XN6501
Q7 8-729-100-66 s 2SC1623-L6
Q8 8-729-100-75 s 2SA812-M5
Q9 8-729-402-78 s XN6401

R1 1-218-254-11 s METAL CHIP 2.55K 0.50% 1/10W
R2 1-218-257-11 s METAL CHIP 4.99K 0.50% 1/10W
R3 1-218-259-11 s METAL CHIP 13.7K 0.50% 1/10W
R6 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W CN1
R7 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W

R8 1-216-665-11 s METAL, CHIP 3.9K 0.5% 1/10W
R12 1-218-254-11 s METAL CHIP 2.55K 0.50% 1/10W
R13 1-218-259-11 s METAL CHIP 13.7K 0.50% 1/10W
R14 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W D1
R15 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W D2

R17 1-216-658-11 s METAL, CHIP 2K 0.5% 1/10W
R21 1-216-658-11 s METAL, CHIP 2K 0.5% 1/10W
R26 1-218-254-11 s METAL CHIP 2.55K 0.50% 1/10W IC1
R27 1-218-257-11 s METAL CHIP 4.99K 0.50% 1/10W IC2
R30 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W IC3

R31 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W
R33 1-216-658-11 s METAL, CHIP 2K 0.5% 1/10W
R37 1-216-658-11 s METAL, CHIP 2K 0.5% 1/10W

RV1 1-238-220-11 s METAL 1K
RV2 1-228-394-00 s METAL 4.7K
RV3 1-238-221-11 s METAL 2.2K
RV4 1-238-219-11 s METAL 470

Ref. No. Part No. SP Description

IE-23 BOARD

A-7513-854-A o MOUNTED CIRCUIT BOARD
"IE-23"

C2 1-131-361-00 s TANTALUM 2.2MF 10% 20V
C3 1-126-154-11 s ELECT 47uF 20% 6.3V
C7 1-163-098-00 s CERAMIC, CHIP 16PF 5% 50V
C9 1-124-589-11 s ELECT 47uF 20% 16V
C16 1-124-589-11 s ELECT 47uF 20% 16V

CN1 1-566-093-11 o PIN, BOARD TO BOARD 8P
CN2 1-506-592-11 o CONNECOTR, 4P
C18 1-123-661-00 s ELECT 100uF 20% 6.3V
C19 1-126-096-11 s ELECT 10uF 20% 25V
C21 1-163-102-00 s CERAMIC, CHIP 24PF 5% 50V
C24 1-126-154-11 s ELECT 47uF 20% 6.3V
C25 1-124-589-11 s ELECT 47uF 20% 16V

C26 1-131-377-00 s TANTALUM 10uF 10% 10V
C32 1-131-365-00 s TANTALUM 10uF 10% 20V
C33 1-126-096-11 s ELECT 10uF 20% 25V
C35 1-126-096-11 s ELECT 10uF 20% 25V
C36 1-126-096-11 s ELECT 10uF 20% 25V

C37 1-126-096-11 s ELECT 10uF 20% 25V
C40 1-124-589-11 s ELECT 47uF 20% 16V
C42 1-126-176-11 s ELECT 220uF 20% 10V
C43 1-124-120-11 s ELECT 220uF 20% 25V
C44 1-124-638-11 s ELECT 22uF 20% 10V
C46 1-124-229-00 s ELECT 33uF 20% 10V
C49 1-131-361-00 s TANTALUM 2.2MF 10% 20V
C51 1-124-638-11 s ELECT 22uF 20% 10V
C52 1-124-638-11 s ELECT 22uF 20% 10V
C53 1-124-638-11 s ELECT 22uF 20% 10V

CN1 1-566-268-21 o CONNECTOR, BOARD TO BOARD 6P
CN2 1-566-274-21 o CONNECTOR, BOARD TO BOARD 12P

8-719-105-28 s RD2.4M-B
8-719-100-05 s 1S2837

8-759-420-12 s MN3801: MATHUSHITA
8-758-150-00 s CX815: SONY
8-759-209-15 s TC4SU69F: TOSHIBA

L1 1-408-422-00 s 120uH
L4 1-410-470-11 s 10uH
L5 1-408-413-00 s 22uH
L7 1-410-470-11 s 10uH
L8 1-410-470-11 s 10uH
L9 1-408-413-00 s 22uH
L10 1-408-413-00 s 22uH
L11 1-408-425-00 s 220uH
L12 1-408-429-00 s 470uH

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
Q1	8-729-100-66	s 2SC1623-L6			
Q3	8-729-100-66	s 2SC1623-L6			
Q4	8-729-100-66	s 2SC1623-L6			
Q5	8-729-100-75	s 2SA812-M5			
Q6	8-729-100-75	s 2SA812-M5			
Q7	8-729-100-66	s 2SC1623-L6	C1	1-124-584-00	s ELECT 100uF 20% 10V
Q8	8-729-100-75	s 2SA812-M5	C3	1-124-148-00	s ELECT 100uF 20% 25V
Q9	8-729-100-75	s 2SA812-M5	C7	1-124-148-00	s ELECT 100uF 20% 25V
Q10	8-729-100-75	s 2SA812-M5	C8	1-124-148-00	s ELECT 100uF 20% 25V
Q12	8-729-122-63	s 2SA1226-E3			
Q13	8-729-100-66	s 2SC1623-L6	CN1	1-565-781-11	o CONNECTOR, TX(S.S) (PC BOARD)50P
Q14	8-729-122-63	s 2SA1226-E3	CN2	1-565-781-11	o CONNECTOR, TX(S.S) (PC BOARD)50P
Q15	8-729-102-65	s 2SC2757-T32	CN3	1-566-579-11	o CONNECTOR, MULTI 50P
Q16	8-729-102-65	s 2SC2757-T32	CN4	1-566-512-11	s CONNECTOR, FPC (ZIF) 12P
Q17	8-729-102-65	s 2SC2757-T32	CN5	1-506-490-21	o PIN, CONNECTOR 11P
Q18	8-729-100-66	s 2SC1623-L6	CN6	1-506-471-11	o CONNECTOR, 6P, MALE 1-562-151-11 o PLUG HOUSING 6P 1-564-026-11 o PLUG CONTACT
Q19	8-729-100-66	s 2SC1623-L6	CN7	1-566-199-11	o PIN, CONNECTOR (PC BOARD) 6P
Q20	8-729-100-66	s 2SC1623-L6	CN8	1-506-467-11	o CONNECTOR, 2P, MALE
Q21	8-729-100-66	s 2SC1623-L6	CN9	1-506-487-11	o CONNECTOR, 8P, MALE 1-562-153-11 o PLUG HOUSING, 8P 1-564-026-00 o PLUG CONTACT
Q22	8-729-100-66	s 2SC1623-L6	CN10	1-506-356-00	o CONNECTOR POST HEADER, ILG (2P)
Q23	8-729-109-41	s 2SK94-X1	CN11	1-506-468-11	o CONNECTOR, 3P, MALE
Q24	8-729-100-66	s 2SC1623-L6	CN13	1-506-487-11	o CONNECTOR, 8P, MALE 1-562-153-11 o PLUG HOUSING, 8P 1-564-026-00 o PLUG CONTACT
Q25	8-729-100-66	s 2SC1623-L6	CN14	1-506-481-11	o CONNECTOR, 2P, MALE
Q27	8-729-100-75	s 2SA812-M5	CN15	1-506-481-11	o CONNECTOR, 2P, MALE
Q28	8-729-100-66	s 2SC1623-L6	CN16	1-506-481-11	o CONNECTOR, 2P, MALE
Q29	8-729-100-66	s 2SC1623-L6	CN17	1-506-481-11	o CONNECTOR, 2P, MALE 1-562-147-11 o PLUG HOUSING, 2P 1-564-026-00 o PLUG CONTACT
Q30	8-729-100-66	s 2SC1623-L6	CN18	1-506-469-11	o CONNECTOR, 4P, MALE
Q31	8-729-122-63	s 2SA1226-E4	CN19	1-506-472-11	o CONNECTOR, 7P, MALE
Q32	8-729-100-66	s 2SC1623-L6	CN21	1-506-482-11	o CONNECTOR, 3P, MALE
Q33	8-729-100-66	s 2SC1623-L6	CN22	1-565-210-11	s CONNECTOR, FPC (ZIF) 30P
R6	1-216-748-11	s RES ,CHIP 39K 5% 1/10W			
R13	1-216-748-11	s METAL, CHIP 39K 1% 1/10W	D1	8-719-108-13	s 1S955
			D2	8-719-108-13	s 1S955
			D3	8-719-105-93	s RD5.6M-B1
RV1	1-226-773-11	s METAL 22K			
RV2	1-226-772-11	s METAL 4.7K			
RV3	1-228-519-00	s METAL 2.2K	IC1	8-759-700-07	s NJM2903M: JRC
RV4	1-226-772-11	s METAL 4.7K	IC2	8-759-209-69	s TC4S11F-TE85L: TOSHIBA
RV5	1-228-395-00	s METAL 10K	IC3	8-759-205-06	s TC74HC74F: TOSHIBA
RV6	1-226-702-00	s METAL 2.2K			
S1	1-553-977-00	s SWITCH, SLIDE	L1	1-408-096-00	s 470UH
			L2	1-408-096-00	s 470UH
			L3	1-408-785-21	s CHIP 47UH
			PU1	1-466-039-11	s DC-DC CONVERTER

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
Q1	8-729-100-66 s	2SC1623-L6	CN1	1-565-794-11 o	HOUSING, CONNECTOR 13P
Q2	8-729-100-66 s	2SC1623-L6	CN2	1-565-132-11 o	HOUSING, CONNECTOR 13P
Q3	8-729-100-66 s	2SC1623-L6	CN3	1-566-989-11 o	HOUSING, CONNECTOR 3P
Q4	8-729-100-66 s	2SC1623-L6		1-565-122-11 o	HOUSING, CONNECTOR 3P
Q5	8-729-100-75 s	2SA812-M5		1-562-147-11 o	HOUSING, CONNECTOR 2P
Q6	8-729-109-41 s	2SK94-X1			
Q7	8-729-100-66 s	2SC1623-L6	CV1	1-141-284-00 s	CAP, TRIMMER
Q8	8-729-199-91 s	2SD999-CM			
Q9	8-729-101-07 s	2SB798-DL	D1	8-719-100-05 s	1S2837
Q10	8-729-100-75 s	2SA812-M5			
Q11	8-729-100-75 s	2SA812-M5	LP1	1-235-839-11 s	FILTER, LOW PASS
Q12	8-729-100-75 s	2SA812-M5			
Q13	8-729-100-66 s	2SC1623-L6			
R4	1-216-671-11 s	METAL FILM CHIP 6.8K 0.5% 1/10W	Q1	8-729-102-65 s	2SC2757-T32
R5	1-216-637-11 s	METAL FILM CHIP 270 0.5% 1/10W	Q2	8-729-100-75 s	2SA812-M5
R6	1-216-677-11 s	METAL FILM CHIP 12K 0.5% 1/10W	Q3	8-769-401-67 s	3SK163-1
R7	1-216-683-11 s	METAL FILM CHIP 22K 0.5% 1/10W	Q4	8-729-100-66 s	2SC1623-L6
R8	1-216-683-11 s	METAL FILM CHIP 22K 0.5% 1/10W	Q5	8-729-100-75 s	2SA812-M5
	Ser. No. 40921 and higher		Q6	8-769-401-67 s	3SK163-1
R21	1-249-399-11 s	CARBON 33 5% 1/4W	Q7	8-729-100-66 s	2SC1623-L6
R22	1-249-399-11 s	CARBON 33 5% 1/4W	Q11	8-729-100-75 s	2SA812-M5
!R27	1-216-369-11 s	METAL OXIDE FILM 1 5% 2W	Q12	8-769-401-67 s	3SK163-1
	Ser. No. 40921 and higher		Q13	8-729-100-66 s	2SC1623-L6
			Q17	8-729-100-66 s	2SC1623-L6
			Q18	8-729-100-66 s	2SC1623-L6
			Q19	8-729-100-66 s	2SC1623-L6
			Q20	8-729-100-66 s	2SC1623-L6
			Q21	8-729-100-75 s	2SA812-M5
			Q22	8-729-100-66 s	2SC1623-L6
			Q24	8-729-100-66 s	2SC1623-L6
PA-73 BOARD					
	A-7513-831-A o	OUNTED CIRCUIT BOARD "PA-73"	R3	1-216-678-11 s	METAL, CHIP 13K 0.5% 1/10W
			R10	1-216-748-11 s	METAL, CHIP 39K 1% 1/10W
			R32	1-216-643-11 s	METAL, CHIP 470 0.5% 1/10W
			R33	1-216-627-11 s	METAL, CHIP 100 0.5% 1/10W
			R35	1-216-662-11 s	METAL, CHIP 3K 0.5% 1/10W
	1-564-026-00 s	CONTACT, FEMALE, AWG24-30	R36	1-216-677-11 s	METAL, CHIP 12K 0.5% 1/10W
	1-565-164-11 o	TERMINAL, SOLDERLESS	R46	1-216-748-11 s	METAL, CHIP 39K 1% 1/10W
	1-566-987-11 o	TERMINAL, SOLDERLESS			
C4	1-135-091-00 s	TANTALUN, CHIP 1uF 10% 16V			
C6	1-135-142-21 s	TANTAL, CHIP 22MF 20% 16V			
C8	1-135-142-21 s	TANTAL, CHIP 22MF 20% 16V			
C9	1-163-037-11 s	CERAMIC, CHIP 0.022uF 5%			
		25V			
C22	1-163-037-11 s	CERAMIC, CHIP 0.022uF 5%			
		25V			
C23	1-126-162-11 s	ELECT 3.3uF 20% 50V			
C24	1-126-162-11 s	ELECT 3.3uF 20% 50V			
C25	1-135-091-00 s	TANTALUN, CHIP 1uF 10% 16V			

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
PA-74 BOARD			R3	1-216-678-11	s METAL, CHIP 13K 0.5% 1/10W
A-7513-832-A	o MOUNTED CIRCUIT BOARD "PA-74"		R10	1-216-748-11	s METAL, CHIP 39K 1% 1/10W
1-564-026-00	s CONTACT, FEMALE, AWG24-30		R32	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W
1-565-164-11	o TERMINAL, SOLDERLESS		R33	1-216-627-11	s METAL, CHIP 100 0.5% 1/10W
1-566-987-11	o TERMINAL, SOLDERLESS		R35	1-216-662-11	s METAL, CHIP 3K 0.5% 1/10W
R36	1-216-677-11	s METAL, CHIP 12K 0.5% 1/10W			
R46	1-216-748-11	s METAL, CHIP 39K 1% 1/10W			
C4	1-135-091-00	s TANTALUN, CHIP 1uF 10% 16V	PA-75 BOARD		
C6	1-131-367-00	s TANTALUM 22uF 10% 20V	A-7513-833-A	o MOUNTED CIRCUIT BOARD "PA-75"	
C8	1-131-367-00	s TANTALUM 22uF 10% 20V			
C9	1-163-037-11	s CERAMIC, CHIP 0.022uF 5% 25V			
C15	1-163-111-00	s CERAMIC, CHIP 56PF 5% 50V			
C22	1-163-037-11	s CERAMIC, CHIP 0.022uF 5% 25V			
C24	1-126-162-11	s ELECT 3.3uF 20% 50V	1-564-026-00	s CONTACT, FEMALE, AWG24-30	
C25	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V	1-565-164-11	o TERMINAL, SOLDERLESS	
C27	1-135-091-00	s TANTALUN, CHIP 1uF 10% 16V	1-566-987-11	o TERMINAL, SOLDERLESS	
CN1	1-565-794-11	o HOUSING, CONNECTOR 13P	C4	1-135-091-00	s TANTALUN, CHIP 1uF 10% 16V
	1-565-132-11	o HOUSING, CONNECTOR 13P	C6	1-135-142-21	s TANTAL, CHIP 22MF 20% 16V
CN2	1-566-989-11	o HOUSING, CONNECTOR 3P	C8	1-135-142-21	s TANTAL, CHIP 22MF 20% 16V
	1-565-122-11	o HOUSING, CONNECTOR 3P	C9	1-163-037-11	s CERAMIC, CHIP 0.022uF 5%
CN3	1-562-147-11	o HOUSING, CONNECTOR 2P			25V
CV1	1-141-284-00	s CAP, TRIMMER	C22	1-163-037-11	s CERAMIC, CHIP 0.022uF 5%
			C27	1-135-091-00	s TANTALUN, CHIP 1uF 10% 16V
D1	8-719-100-05	s 1S2837	CN1	1-565-794-11	o HOUSING, CONNECTOR 13P
LP1	1-235-839-11	s FILTER, LOW PASS	CN2	1-565-132-11	o HOUSING, CONNECTOR 13P
			CN3	1-566-990-11	o HOUSING, CONNECTOR 4P
				1-565-123-11	o HOUSING, CONNECTOR 4P
				1-562-147-11	o HOUSING, CONNECTOR 2P
Q1	8-729-102-65	s 2SC2757-T32	CV1	1-141-284-00	s CAP, TRIMMER
Q2	8-729-100-75	s 2SA812-M5	D1	8-719-100-05	s 1S2837
Q3	8-769-401-67	s 3SK163-1	LP1	1-235-839-11	s FILTER, LOW PASS
Q4	8-729-100-66	s 2SC1623-L6	Q1	8-729-102-65	s 2SC2757-T32
Q5	8-729-100-75	s 2SA812-M5	Q2	8-729-100-75	s 2SA812-M5
Q6	8-769-401-67	s 3SK163-1	Q3	8-769-401-67	s 3SK163-1
Q7	8-729-100-66	s 2SC1623-L6	Q4	8-729-100-66	s 2SC1623-L6
Q11	8-729-100-75	s 2SA812-M5	Q5	8-729-100-75	s 2SA812-M5
Q12	8-769-401-67	s 3SK163-1	Q6	8-769-401-67	s 3SK163-1
Q13	8-729-100-66	s 2SC1623-L6	Q7	8-729-100-66	s 2SC1623-L6
Q17	8-729-100-66	s 2SC1623-L6	Q8	8-729-100-75	s 2SA812-M5
Q18	8-729-100-66	s 2SC1623-L6	Q9	8-769-401-67	s 3SK163-1
Q19	8-729-100-66	s 2SC1623-L6	Q10	8-729-100-66	s 2SC1623-L6
Q20	8-729-100-66	s 2SC1623-L6			
Q21	8-729-100-75	s 2SA812-M5			
Q22	8-729-100-66	s 2SC1623-L6			
Q24	8-729-100-66	s 2SC1623-L6			

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
Q11	8-729-100-75	s 2SA812-M5	D1	8-719-100-05	s 1S2837
Q12	8-769-401-67	s 3SK163-1	D2	8-719-100-05	s 1S2837
Q13	8-729-100-66	s 2SC1623-L6	D3	8-719-100-05	s 1S2837
Q14	8-729-100-75	s 2SA812-M5	D4	8-719-911-19	s 1SS119
Q15	8-769-401-67	s 3SK163-1			Ser.No 40001 ~ 42080
Q16	8-729-100-66	s 2SC1623-L6		8-719-100-03	s 1S2835
Q17	8-729-100-66	s 2SC1623-L6	D6	8-719-914-12	s HZ4BLL
Q18	8-729-100-66	s 2SC1623-L6	D7	8-719-914-12	s HZ4BLL
Q19	8-729-100-66	s 2SC1623-L6	D8	8-719-914-12	s HZ4BLL
Q20	8-729-100-66	s 2SC1623-L6	D9	8-719-100-03	s 1S2835
Q21	8-729-100-75	s 2SA812-M5	D10	8-719-100-03	s 1S2835
Q22	8-729-100-66	s 2SC1623-L6	D12	8-719-105-52	s RD3.6M-B2
Q24	8-729-100-66	s 2SC1623-L6	D13	8-719-105-52	s RD3.6M-B2

R3	1-216-678-11	s METAL, CHIP 13K 0.5% 1/10W	DL1	1-415-307-00	s 165nS
R10	1-216-748-11	s METAL, CHIP 39K 1% 1/10W	DL2	1-415-307-00	s 165nS
R22	1-216-088-00	s METAL, CHIP 43K 5% 1/10W	DL3	1-415-307-00	s 165nS
R32	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W			
R33	1-216-627-11	s METAL, CHIP 100 0.5% 1/10W			
R35	1-216-662-11	s METAL, CHIP 3K 0.5% 1/10W	IC1	8-759-204-40	s TC40H027F: TOSHIBA
R36	1-216-677-11	s METAL, CHIP 12K 0.5% 1/10W	IC2	8-759-201-50	s TC40H193F: TOSHIBA
R46	1-216-748-11	s METAL, CHIP 39K 1% 1/10W	IC3	8-759-201-63	s TC40H032F: TOSHIBA
			IC4	8-759-201-53	s TC40H000F: TOSHIBA
			IC5	8-759-209-97	s TC4S81F: TOSHIBA
			IC6	8-759-209-97	s TC4S81F: TOSHIBA
			IC7	8-759-204-51	s TC40H008F: TOSHIBA
			IC8	8-759-208-11	s TC4053BFHB: TOSHIBA
			IC9	8-759-209-97	s TC4S81F: TOSHIBA
			IC10	8-759-209-97	s TC4S81F: TOSHIBA
			IC11	8-759-209-15	s TC4SU69F: TOSHIBA
			IC12	8-759-209-54	s TC4S01F: TOSHIBA
			IC13	8-759-209-15	s TC4SU69F: TOSHIBA
			IC14	8-759-209-90	s TC4S71F: TOSHIBA
			IC15	8-759-209-90	s TC4S71F: TOSHIBA
C1	1-124-638-11	s ELECT 22uF 20% 10V	IC16	8-759-209-90	s TC4S71F: TOSHIBA
C2,C3,	1-163-111-00	s CERAMIC CHIP 56PF 5% 50V	IC17	8-759-209-90	s TC4S71F: TOSHIBA
C4,C5	Ser No. 41521 and higher (EK)				
C14	1-124-589-11	s ELECT 47uF 20% 16V	Q1	8-729-102-65	s 2SC2757-T32
C24	1-124-472-11	s ELECT 470uF 20% 10V	Q2	8-729-102-65	s 2SC2757-T32
C25	1-124-471-00	s ELECT 1000uF 20% 6.3V	Q3	8-729-102-65	s 2SC2757-T32
C26	1-124-471-00	s ELECT 1000uF 20% 6.3V	Q4	8-729-102-65	s 2SC2757-T32
C27	1-126-157-11	s ELECT 10uF 20% 16V	Q5	8-729-109-41	s 2SK94-X1
C28	1-126-157-11	s ELECT 10uF 20% 16V			
C29	1-126-157-11	s ELECT 10uF 20% 16V			
C37	1-126-157-11	s ELECT 10uF 20% 16V	Q6	8-729-100-66	s 2SC1623-L6
C39	1-124-589-11	s ELECT 47uF 20% 16V	Q7	8-729-901-46	s DTA114YK
C41	1-126-157-11	s ELECT 10uF 20% 16V	Q8	8-729-900-52	s DTC114YK
C42	1-126-157-11	s ELECT 10uF 20% 16V	Q9	8-729-900-52	s DTC114YK
C43	1-126-157-11	s ELECT 10uF 20% 16V	Q10	8-729-100-75	s 2SA812-M5
C44	1-124-472-11	s ELECT 470uF 20% 10V			
C47	1-126-157-11	s ELECT 10uF 20% 16V	Q11	8-729-100-75	s 2SA812-M5
C48	1-126-157-11	s ELECT 10uF 20% 16V	Q12	8-729-100-75	s 2SA812-M5
C50	1-102-106-21	s CERAMIC 100PF 10% 50V	Q13	8-729-100-66	s 2SC1623-L6
		Ser.No 40001 ~ 42080	Q14	8-729-100-75	s 2SA812-M5
			Q15	8-729-100-75	s 2SA812-M5
CN1	1-563-679-21	o CONNECTOR, BOARD TO BOARD			
CN2	1-563-685-21	o CONNECTOR, BOARD TO BOARD	6P		
CN3	1-565-780-11	o CONNECTOR, TX(P.L.)	12P		
		(PC BOARD)50P			

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
Q16	8-729-100-66	s 2SC1623-L6			
Q17	8-729-100-75	s 2SA812-M5			
Q18	8-729-100-66	s 2SC1623-L6			
Q19	8-729-100-66	s 2SC1623-L6			
Q20	8-729-100-66	s 2SC1623-L6			
Q21	8-729-100-66	s 2SC1623-L6	C2	1-135-091-00	s TANTALUN, CHIP 1uF 10% 16V
Q22	8-729-100-66	s 2SC1623-L6	C3	1-135-091-00	s TANTALUN, CHIP 1uF 10% 16V
Q23	8-729-100-66	s 2SC1623-L6	C4	1-135-091-00	s TANTALUN, CHIP 1uF 10% 16V
Q24	8-729-100-66	s 2SC1623-L6	C9	1-163-088-00	s CERAMIC, CHIP 5PF 50V
Q25	8-729-100-66	s 2SC1623-L6	C11	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V
Q26	8-729-901-46	s DTA114YK	C15	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V
Q31	8-729-100-75	s 2SA812-M5	C16	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V
Q32	8-729-100-75	s 2SA812-M5			
Q33	8-729-100-66	s 2SC1623-L6			
Q34	8-729-100-66	s 2SC1623-L6			
R24	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W	CN1	1-566-094-11	o PIN, BOARD TO BOARD 9P
R25	1-216-665-11	s METAL, CHIP 3.9K 0.5%	CN2	1-566-093-11	o PIN, BOARD TO BOARD 8P
		1/10W			
R26	1-216-685-11	s METAL, CHIP 27K 0.5% 1/10W	D1	8-719-100-03	s 1S2835
R27	1-216-686-11	s METAL, CHIP 30K 0.5% 1/10W	D2	8-719-100-03	s 1S2835
R28	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W	D3	8-719-942-31	s HZ3ALL
R29	1-216-665-11	s METAL, CHIP 3.9K 0.5% 1/10W	D4	8-719-100-03	s 1S2835
R30	1-216-685-11	s METAL, CHIP 27K 0.5% 1/10W	D5	8-719-100-03	s 1S2835
R31	1-216-686-11	s METAL, CHIP 30K 0.5% 1/10W			
R32	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W			
R33	1-216-665-11	s METAL, CHIP 3.9K 0.5% 1/10W	IC1	8-759-030-16	s TL062ACPS: TI
R34	1-216-685-11	s METAL, CHIP 27K 0.5% 1/10W	IC2	8-759-030-16	s TL062ACPS: TI
R35	1-216-686-11	s METAL, CHIP 30K 0.5% 1/10W			
R69	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W	Q1	8-729-100-66	s 2SC1623-L6
R70	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W	Q2	8-729-100-66	s 2SC1623-L6
R78	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W	Q3	8-729-100-66	s 2SC1623-L6
R79	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W	Q4	8-729-109-41	s 2SK94-X1
R84	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W	Q5	8-729-122-63	s 2SA1226
R85	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W	Q6	8-729-100-66	s 2SC1623-L6
			Q7	8-729-100-66	s 2SC1623-L6
			Q8	8-729-102-65	s 2SC2757-T32
RV1	1-226-703-11	s METAL 10K	Q9	8-729-109-41	s 2SK94-X1
RV2	1-226-771-11	s METAL 1K	Q10	8-729-402-78	s XN6401
RV3	1-226-771-11	s METAL 1K			
RV4	1-226-771-11	s METAL 1K	Q11	8-729-402-78	s XN6401
RV5	1-226-771-11	s METAL 1K	Q12	8-729-402-19	s XN6501
RV6	1-238-222-11	s METAL 4.7K	Q13	8-729-100-66	s 2SC1623-L6
RV7	1-238-222-11	s METAL 4.7K			
RV8	1-238-222-11	s METAL 4.7K			
RV9	1-226-702-00	s METAL 2.2K			
RV10	1-226-702-00	s METAL 2.2K			
RV11	1-226-702-00	s METAL 2.2K			
RV12	1-238-225-11	s METAL 47K			
RV13	1-238-225-11	s METAL 47K			
RV14	1-238-225-11	s METAL 47K			
RV15	1-238-225-11	s METAL 47K			
RV16	1-238-225-11	s METAL 47K			

Ref. No.	Part No.	SP Description
R15	1-216-658-11	s METAL, CHIP 2K 0.5% 1/10W
R16	1-216-631-11	s METAL, CHIP 150 0.5% 1/10W
R17	1-216-653-11	s METAL, CHIP 1.2K 0.5% 1/10W
R18	1-216-627-11	s METAL, CHIP 100 0.5% 1/10W
R19	1-216-655-11	s METAL, CHIP 1.5K 0.5% 1/10W
R22	1-216-648-11	s METAL, CHIP 750 0.5% 1/10W
R23	1-216-653-11	s METAL, CHIP 1.2K 0.5% 1/10W
R24	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R26	1-216-683-11	s METAL, CHIP 22K 0.5% 1/10W
R27	1-216-683-11	s METAL, CHIP 22K 0.5% 1/10W
R28	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W

RV1	1-238-219-11	s METAL 470
RV2	1-238-222-11	s METAL 4.7K

VA-70 BOARD

A-7513-849-A	o MOUNTED CIRCUIT BOARD "VA-70R"
A-7513-850-A	o MOUNTED CIRCUIT BOARD "VA-70G"
A-7513-851-A	o MOUNTED CIRCUIT BOARD "VA-70B"
C1	1-163-088-00 s CERAMIC, CHIP 5PF 50V(G,R) Ser.No 40001 ~ 42080
C2	1-163-088-00 s CERAMIC, CHIP 5PF 50V(B,R)
C3	1-163-088-00 s CERAMIC, CHIP 5PF 50V
C9	1-135-159-21 s TANTAL, CHIP 10MF 20% 16V
C10	1-135-159-21 s TANTAL, CHIP 10MF 20% 16V
C13	1-163-088-00 s CERAMIC, CHIP 5PF 50V
C14	1-135-159-21 s TANTAL, CHIP 10MF 20% 16V
C17	1-163-088-00 s CERAMIC, CHIP 5PF 50V
C18	1-135-099-00 s TANTALUM, CHIP 2.2uF 10% 6.3V
C21	1-135-145-11 s TANTALUM, CHIP 0.47uF 10% 35V
C23	1-135-159-21 s TANTAL, CHIP 10MF 20% 16V
C25	1-102-942-00 s CERAMIC 5PF +0.5PF 50V (G,R) Ser No. 42081 ~ 42850
	1-102-936-00 s CERAMIC 3PF +0.25PF 50V (B) Ser No. 42081 ~ 42850
	1-163-088-00 s CERAMIC 5PF +0.25PF 50V (G,R) Ser No. 42851 ~
	1-163-086-00 s CERAMIC 3PF +0.25PF 50V (B) Ser No. 42851 ~

Ref. No.	Part No.	SP Description
CN1	1-566-093-11	o PIN, BOARD TO BOARD 8P
CN2	1-566-093-11	o PIN, BOARD TO BOARD 8P
D1	8-719-100-03	s 1S2835 Ser.No 40001 ~ 42080
D2	8-719-100-03	s 1S2835 Ser.No 40001 ~ 42080
D3	8-719-100-03	s 1S2835
D4	8-719-100-03	s 1S2835
D5	8-719-100-03	s 1S2835
D6	8-719-951-12	s HZ5BLL
D7	8-719-100-03	s 1S2835

IC1	8-759-700-95	s NJM1496M: JRC
IC2	8-759-030-16	s TL062ACPS: TI

Q1, Q2	8-729-109-41	s 2SK94-X1 Ser No. 10001 ~ 10920 (UC) 30001 ~ 30610 (J) 40001 ~ 42080 (EK)
	8-729-109-43	s 2SK94-X3 Ser No. 10921 and higher (UC) 30611 and higher (J) 42081 and higher (EK)
Q3	8-729-100-66	s 2SC1623-L6
Q4	8-729-100-66	s 2SC1623-L6
Q5	8-729-122-63	s 2SA1226

Q6	8-729-122-63	s 2SA1226
Q7	8-729-100-75	s 2SA812-M5
Q8	8-729-402-19	s XN6501
Q9	8-729-109-43	s 2SK94-X3
Q10	8-729-109-43	s 2SK94-X3
Q11	8-729-109-43	s 2SK94-X3
Q12	8-729-109-43	s 2SK94-X3
Q13	8-729-402-16	s XN4608
Q14	8-729-100-75	s 2SA812-M5
Q15	8-729-102-65	s 2SC2757-T32
Q16	8-729-100-66	s 2SC1623 Ser.No 42081 ~

R2	1-216-655-11	s METAL, CHIP 1.5K 0.5% 1/10W (G,R)
R5	1-216-673-11	s METAL,CHIP 8.2K 0.5% 1/10W
R6	1-216-655-11	s METAL,CHIP 1.5K 0.5% 1/10W
R7	1-216-667-11	s METAL,CHIP 4.7K 0.5% 1/10W
R14	1-216-643-11	s METAL,CHIP 470 0.5% 1/10W
R21	1-216-663-11	s METAL,CHIP 3.3K 0.5% 1/10W
R32	1-216-691-11	s METAL,CHIP 47K 0.5% 1/10W
R34	1-216-691-11	s METAL,CHIP 47K 0.5% 1/10W
R43	1-259-877-00	s CARBON 1.2M 5% 1/4W (G,R)
	1-259-879-00	s CARBON 1.8M 5% 1/4W (B)
		Ser No. 42081 ~ 42850

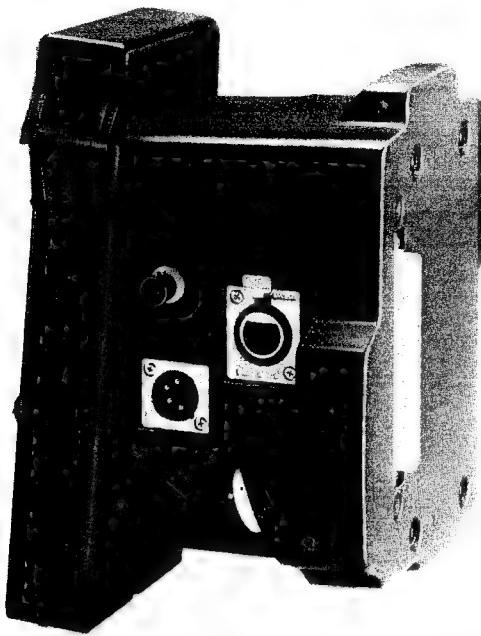
SW-281 BOARD

1-627-915-11 o PRINTED CIRCUIT BOARD
"SW-281"

DXC-325P(EK)

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
	1-564-026-00	s CONTACT, FEMALE, AWG24-30	CN1	1-563-684-11	o CONNECTOR, BOARD TO BOARD 11P
			CN2	1-563-685-11	o CONNECTOR, BOARD TO BOARD 12P
CN3	1-562-151-11	o HOUSING 6P	CN3	1-563-684-11	o CONNECTOR, BOARD TO BOARD 11P
			CN4	1-563-684-11	o CONNECTOR, BOARD TO BOARD 11P
S1	1-570-854-11	s SWITCH, SLIDE	CP1	1-577-182-11	s OSCILLATOR, CRYSTAL
S2	1-570-854-11	s SWITCH, SLIDE			
SW-282 BOARD			IC1	8-752-329-56	s CXD1155Q: SONY
	1-627-922-11	o PRINTED CIRCUIT BOARD "SW-282"	IC2	8-759-205-03	s TC74HC27F: TOSHIBA
			IC3	8-759-007-62	s MC74HC74F: MOTOROLA
			IC4	8-759-204-96	s TC74HC04F: TOSHIBA
			IC5	8-752-329-33	s CXD1251Q: SONY
			IC1	8-759-747-92	s MB7114LPF: FUJITSU
CN4	1-562-148-11	o HOUSING 3P	L1	1-408-783-00	s CHIP 33UH
CN8	1-562-147-11	o HOUSING, CONNECTOR 2P	L2	1-408-785-21	s CHIP 47UH
R1	1-249-401-11	s CARBON 47 5% 1/4W	L3	1-408-783-00	s CHIP 33UH
S1	1-553-739-21	s SWITCH, TACTILE	Q2	8-729-100-75	s 2SA812-M5
S2	1-553-739-21	s SWITCH, TACTILE	R38	1-247-903-00	s CARBON 1M 5% 1/4W
SW001	1-554-486-00	s SWITCH, TOGGLE	FRAME		
TG-38 BOARD			1-542-112-11	s MIC	
	A-7513-830-A	o MOUNTED CIRCUIT BOARD "TG-38"	1-547-301-11	o FILTER UNIT, OPTICAL	
	Ser.No 10001 ~	10720 (UC)	1-574-144-11	s WIRE, FLAT TYPE(12CORE)	
	30001 ~	30840 (J)	1-574-145-11	s WIRE, FLAT TYPE(30CORE)	
	40001 ~	42530 (EK)			
	A-7513-998-A	o MOUNTED CIRCUIT BOARD "TG-38"	CN101	1-561-781-21	s SOCKET, DIN 8P
	Ser.No 10721 ~	(UC)	CN102	1-565-653-11	s CONNECTOR SMALL TYPE 8P
	30841 ~	(J)	CN104	1-561-781-21	s SOCKET, DIN 8P
	42531 ~	(EK)	CN105	1-562-222-41	s RECEPTACLE, 6P FEMALE
			SW102	1-553-972-00	s TOGGLE
C4	1-135-125-21	s TANTALUM,CHIP 33uF 20% 10V			
C6	1-163-037-11	s CERAMIC,CHIP 0.022uF 5%			
		25V			
C7	1-135-125-21	s TANTALUM,CHIP 33uF 20% 10V			
C9	1-163-037-11	s CERAMIC,CHIP 0.022uF 5%			
		25V			
C10	1-135-124-21	s TANTALUM,CHIP 22uF 20% 10V			
C12	1-163-037-11	s CERAMIC,CHIP 0.022uF 5%			
		25V			
C13	1-131-374-00	s TANTALUM 33uF 10% 16V			
C21	1-135-124-21	s TANTALUM,CHIP 22uF 20% 10V			
C23	1-163-095-00	s CERAMIC, CHIP 12P 5% 50V			
C24	1-161-051-00	s CERAMIC 0.01 10% 25V			

CAMERA ADAPTOR



SPECIFICATIONS

Inputs/Outputs	VTR/CCU/CMA connector: Sony Q-type, 14-pin DC IN: XLR-type, Male 4-pin MIC IN: XLR-type, Female, 3-pin, balanced GEN LOCK: BNC-type, 75 ohms, unbalanced EARPHONE: mini jack INTERCOM: mini intercom jack
Power requirements	12 V DC
Weight	Approx. 960 g (2 lb 2 oz)
Dimensions	Approx. 129 × 197 × 148 mm (w/h/d) (5 1/8 × 7 7/8 × 5 7/8 inches)
Supplied accessories	Screws for attaching the CA-325/325P M4 × 6 (2) M4 × 12 (2) Operating Instructions (1)

Design and specifications are subject to change without notice.

SONY®
SERVICE MANUAL

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A. BLOCK DIAGRAM

Overall A-1

B. SEMICONDUCTOR

Semiconductor B-1

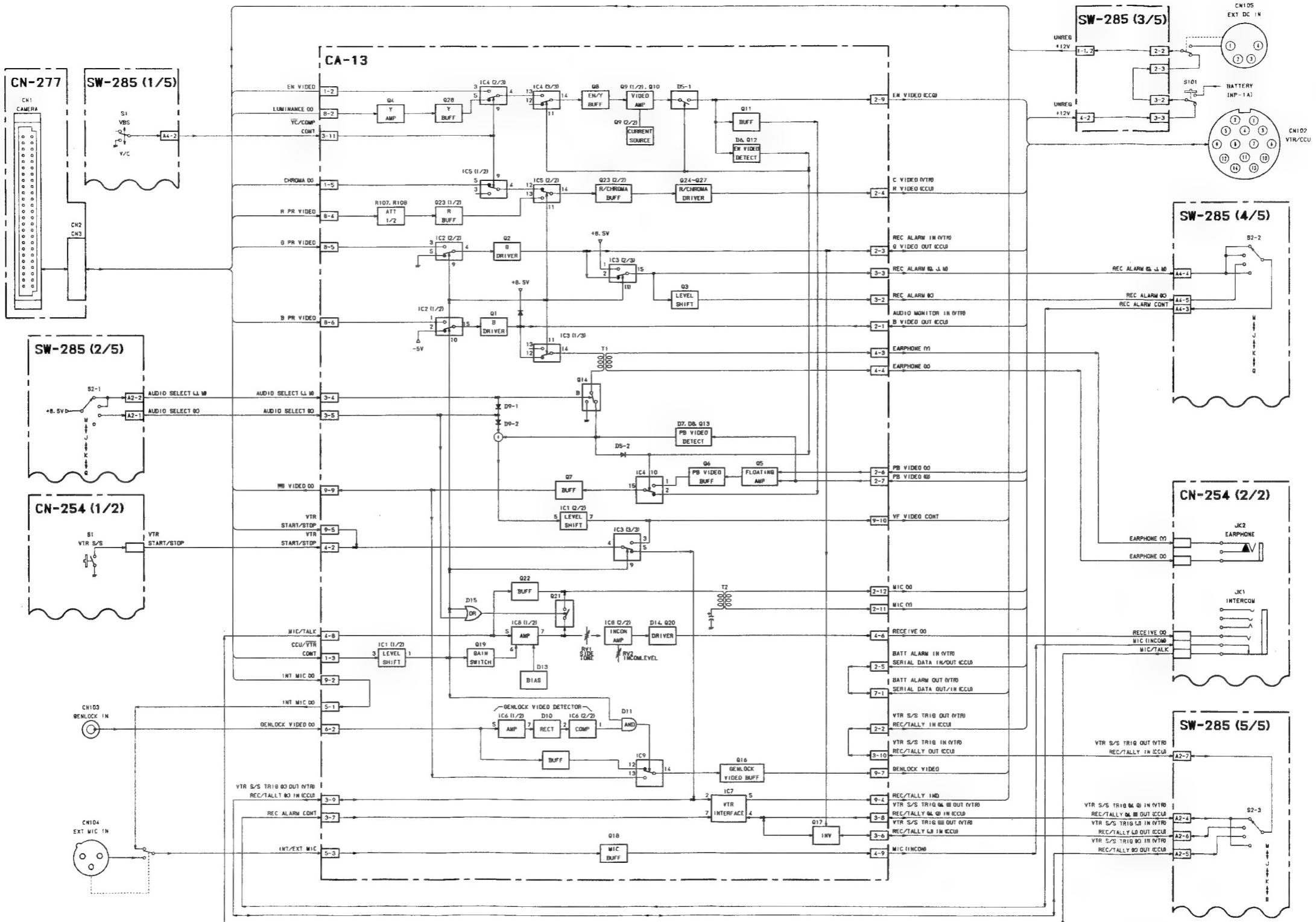
C. SCHEMATIC DIAGRAMS AND BOARD ILLUSTRATION

CA-13 —
CN-254 —
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D. SPARE PARTS

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**SECTION A
BLOCK DIAGRAM**



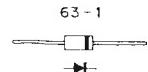
OVERALL BLOCK

SECTION B SEMICONDUCTOR

The circuit diagram of is obtained from the IC data book published by the manufacturer.

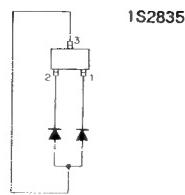
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1S2348H.....	B-2
1S2835.....	B-2
1S2837.....	B-2
ISS123.....	B-2
2SA812.....	B-2
2SC1623.....	B-2
2SC2878.....	B-2
2SK94.....	B-2
CX518.....	B-3
NJM2043M-D.....	B-3
NJM2903M.....	B-3
RD? ?M-B?.....	B-2
SB05-05CP.....	B-2
TC4053BF.....	B-3
μ PC4558G2.....	B-3
XN4608.....	B-2
XN6401.....	B-2
XN6501.....	B-2
XN6534.....	B-2

DIODE, TRANSISTOR



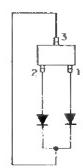
1S2348H

TOP VIEW (SCALE 4/1)



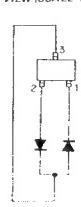
TOP VIEW (SCALE 4/1)

1S2837



TOP VIEW (SCALE 4/1)

1SS123



TOP VIEW (SCALE 4/1)



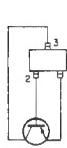
RD ? ? MB ?

TOP VIEW (SCALE 4/1)



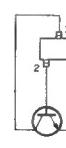
SB05-05CP

TOP VIEW (SCALE 4/1)



2SA812

TOP VIEW (SCALE 4/1)

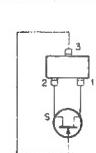


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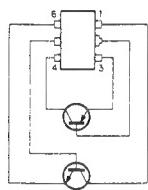


2SC2878

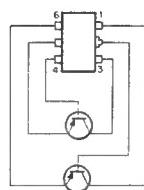
TOP VIEW (SCALE 4/1)



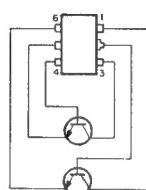
2SK94



XN4608



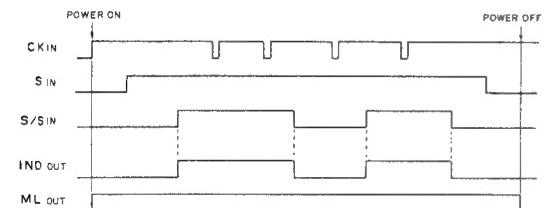
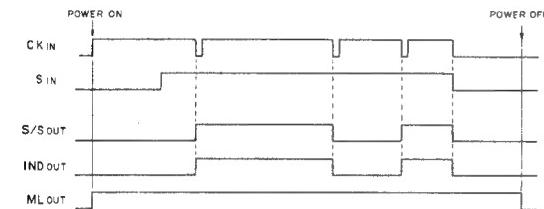
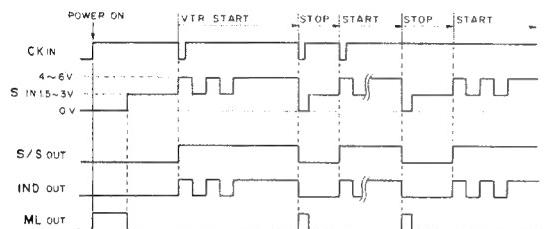
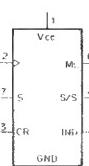
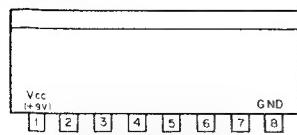
XN6401
XN6435



XN6501
XN6534

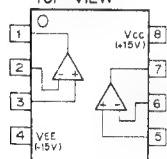
CX518 (SONY)

INTERFACE CIRCUIT BETWEEN VTR AND CAMERA
- SIDE VIEW -



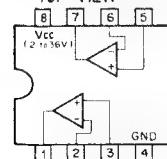
NJM2043M-D (JRC) FLAT PACKAGE
RC2043MC (RAYTHEON) FLAT PACKAGE

OPERATIONAL AMPLIFIER
- TOP VIEW -

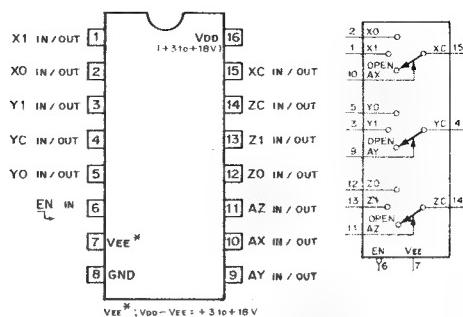


NJM2903M (JRC) FLAT PACKAGE
LM2903M (RAYTHEON) FLAT PACKAGE

OPERATIONAL AMPLIFIER
- TOP VIEW -

**TC4053BF (TOSHIBA) FLAT PACKAGE**

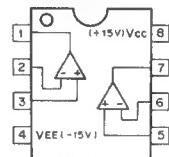
C-MOS 2-CHANNEL MULTIPLEXER/DEMULTIPLEXER
- TOP VIEW -



CONT INPUTS	ON	CHANNEL
EN A (X,Y,Z)	0	0
0	1	1
X; DONT CARE.	1	OPEN

uPC4558G2 (NEC) FLAT PACKAGE

OPERATIONAL AMPLIFIER
- TOP VIEW -

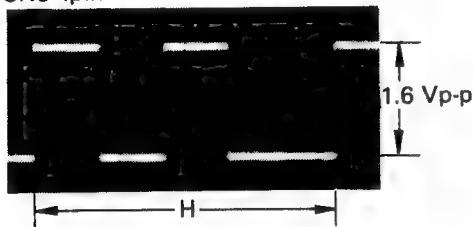


CA-13

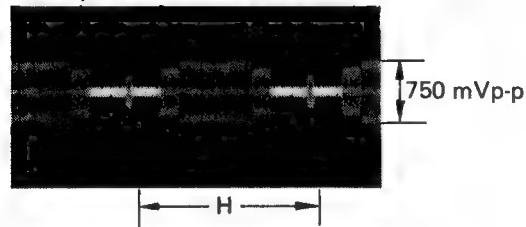
NOTE:

1. All voltage are dc, measured with a digital voltmeter. (input impedance: $10M\Omega$)
 2. All waveforms are taken and DC voltage is measured in condition below.
- . Set camera BARS/WB selector to BARS position.
 - . Set camera OUTPUT selector to VBS position.

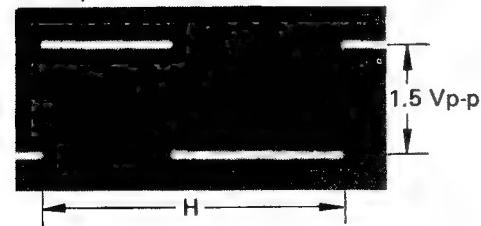
CN8-4pin



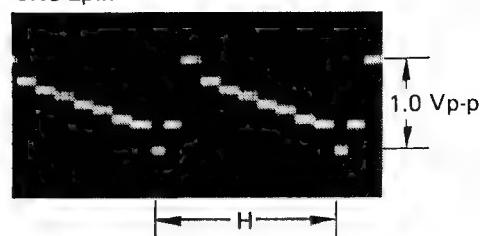
CN1-5pin



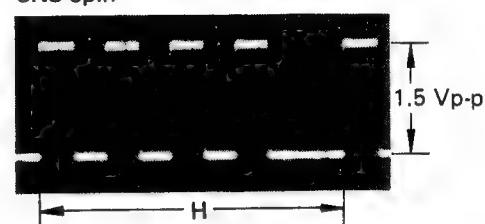
CN8-5pin



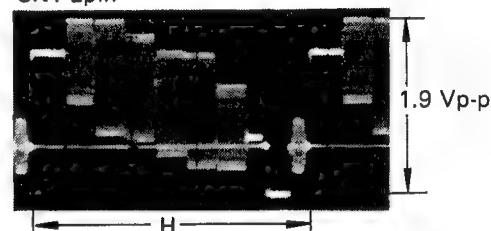
CN8-2pin



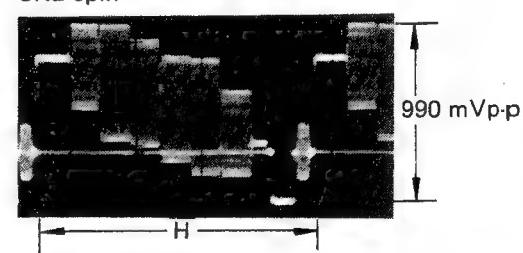
CN8-6pin



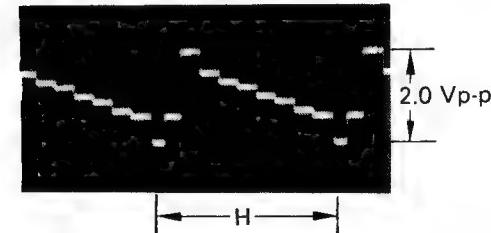
CN1-2pin



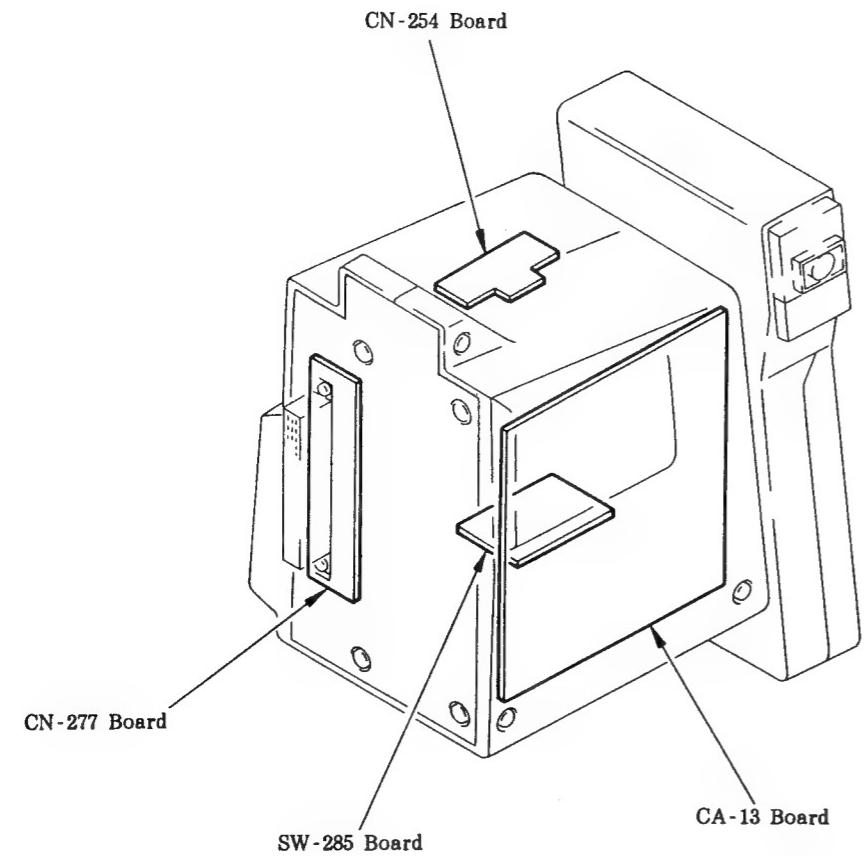
CN2-9pin



Q28-emitter



SECTION C
SCHEMATIC DIAGRAMS AND BOARD ILLUSTRATIONS



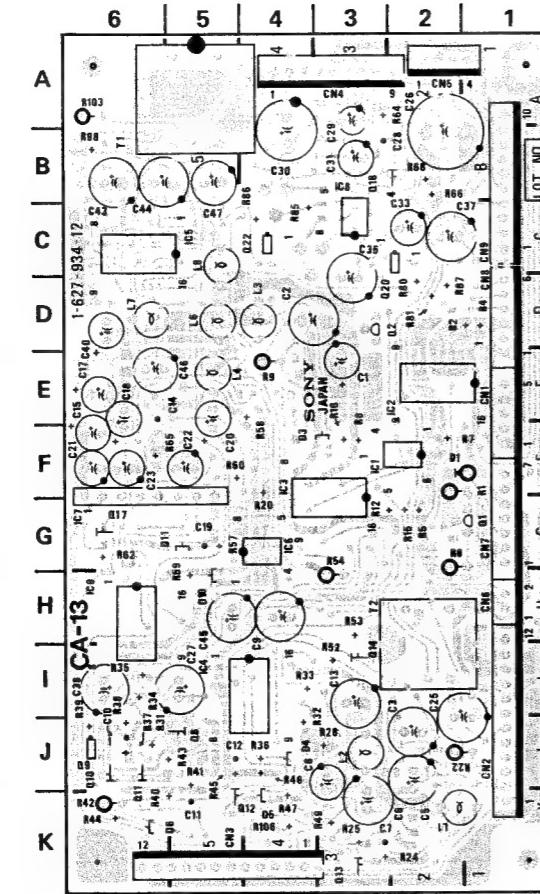
CA-13 BOARD

Ser. No. 10001-11270 (UC)
 30001-30810 (J)
 40001-42080 (EK)

CA-13 (1-627-934-11,12)

CN1	E-1
CN2	K-1
CN3	K-5
CN4	A-3
CN5	A-2
CN6	H-1
CN7	G-1
CN8	D-1
CN9	B-1
D1	F-2
D2	G-2
D3	F-3
D4	J-4
D5	K-4
D6	K-5
D7	K-3
D8	K-2
D9	K-3
D10	H-5
D11	G-5
D12	H-6
D13	B-4
D14	C-3
D15	A-2
D16	E-4

IC1	F-2
IC2	E-2
IC3	G-3
IC4	I-4
IC5	C-6
IC6	G-4
IC7	F-6
IC8	C-3
IC9	H-6

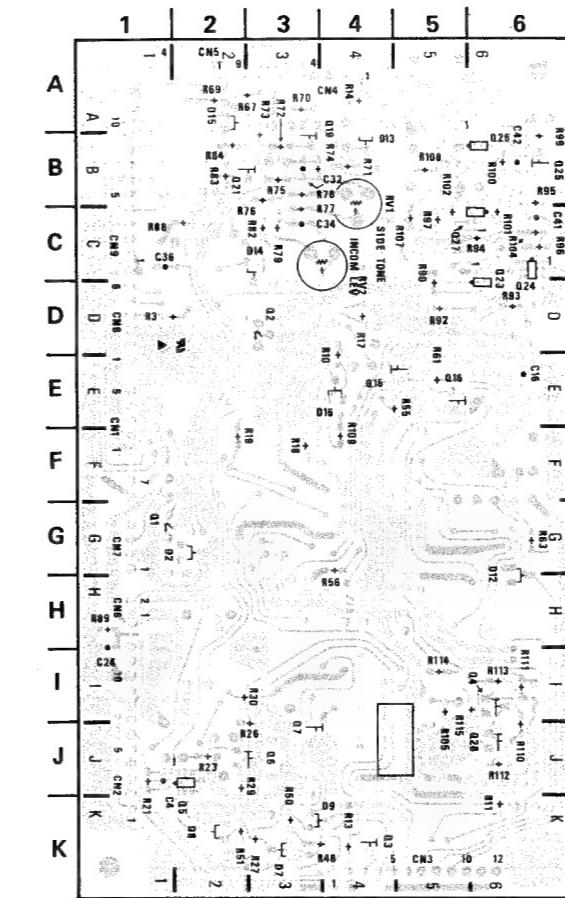


1-627-934-11 COMPONENT SIDE

Q1	G-1
Q2	D-3
Q3	K-4
Q4	I-6
Q5	J-2
Q6	J-3
Q7	J-3
Q8	J-5
Q9	J-6
Q10	J-6
Q11	J-6
Q12	K-5
Q13	K-3
Q14	I-3
Q15	E-5
Q16	E-5
Q17	G-6
Q18	B-3
Q19	B-3
Q20	C-2
Q21	B-3
Q22	C-4
Q23	D-6
Q24	C-6
Q25	B-6
Q26	B-6
Q27	C-6
Q28	J-6

T1	B-6
T2	H-3

C-4 (a)



1-627-934-11 SOLDERING SIDE

CA-13 (1-627-934-11,12)

CN1	E-1
CN2	K-1
CN3	K-5
CN4	A-3
CN5	A-2
CN6	H-1
CN7	G-1
CN8	D-1
CN9	B-1

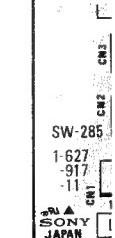
D1	F-2
D2	G-2
D3	F-3
D4	J-4
D5	K-4
D6	K-5
D7	K-3
D8	K-2
D9	K-3
D10	H-5
D11	G-5
D12	H-6
D13	B-4
D14	C-3
D15	A-2
D16	E-4

IC1	F-2
IC2	E-2
IC3	G-3
IC4	I-4
IC5	C-6
IC6	G-4
IC7	F-6
IC8	C-3
IC9	H-6

Q1	G-1
Q2	D-3
Q3	K-4
Q4	I-6
Q5	J-2
Q6	J-3
Q7	J-3
Q8	J-5
Q9	J-6
Q10	J-6
Q11	J-6
Q12	K-5
Q13	K-3
Q14	I-3
Q15	E-5
Q16	E-5
Q17	G-6
Q18	B-3
Q19	B-3
Q20	C-2
Q21	B-3
Q22	C-4
Q23	D-6
Q24	C-6
Q25	B-6
Q26	B-6
Q27	C-6
Q28	J-6

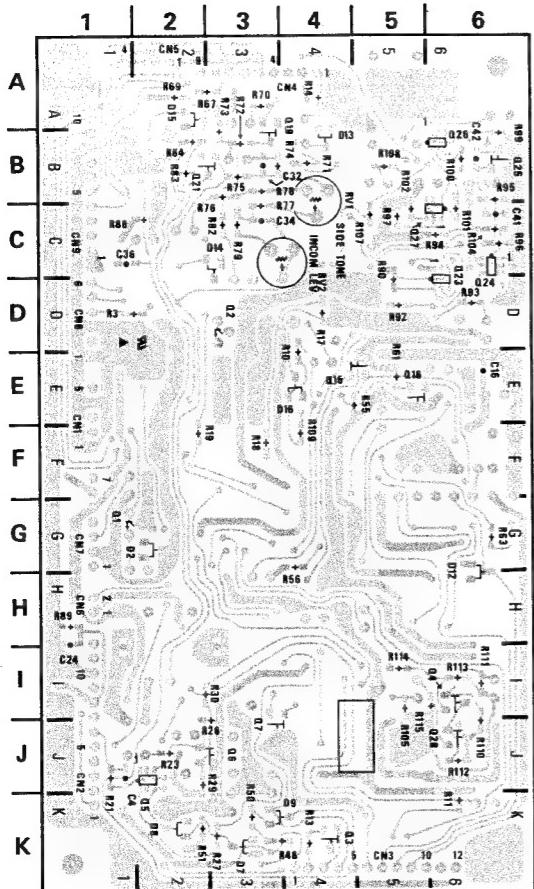
T1	B-6
T2	H-3

C-5 (a)



CN-277 BOARD

CA-13 (1-627-934-11,12)



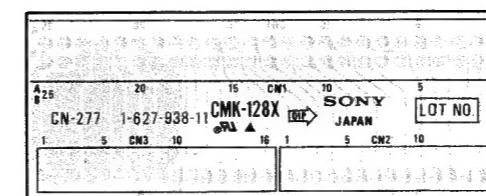
CN1	E-
CN2	K-
CN3	K-
CN4	A-
CN5	A-
CN6	H-
CN7	G-
CN8	D-
CN9	B-

D1	F-
D2	G-
D3	F--
D4	J-
D5	K-
D6	K-
D7	K-
D8	K-
D9	K-
D10	H-
D11	G-
D12	H-
D13	B-
D14	C-
D15	A-
D16	E-

IC1	F-
IC2	E-
IC3	G-
IC4	I-
IC5	C-
IC6	G-
IC7	F-
IC8	C-
IC9	H-

Q1	G-
Q2	D-
Q3	K-
Q4	I-
Q5	J-
Q6	J-
Q7	J-
Q8	J-
Q9	J-
Q10	J-
Q11	J-
Q12	K-
Q13	K-
Q14	I-
Q15	E-
Q16	E-
Q17	G-
Q18	B-
Q19	B-
Q20	C-
Q21	B-
Q22	C-
Q23	D-
Q24	C-
Q25	B-
Q26	B-
Q27	C-
Q28	I-

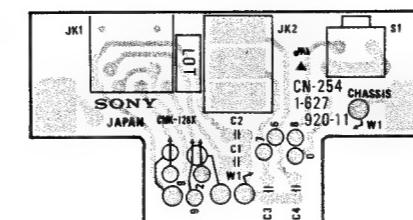
C-5 (a)



1996-1997
1997-1998
1998-1999
1999-2000
2000-2001
2001-2002
2002-2003
2003-2004
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2006-2007
2007-2008
2008-2009
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2018-2019
2019-2020
2020-2021
2021-2022

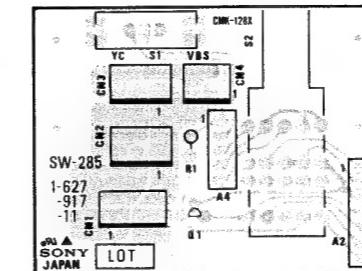
CN-254 BOARD

Ser . No . 10001-11270 (UC)
30001-30810 (J)
40001-42080 (EK)



1-627-920-11 COMPOUND 11 100%

SW-285 BOARD



2-677-007-13 COMMERCIAL 913

T1 B-
T2 H-

C-6 (a)

CA-13 BOARD

Ser. No. 11271-	(UC)
30811-	(J)
42081-	(EK)

CA-13 (1-627-934-11,12)

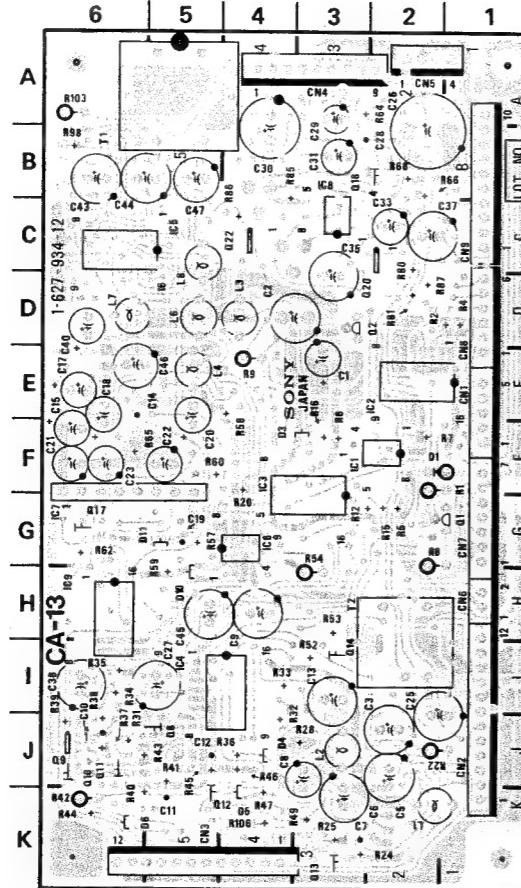
CN1 E-1
CN2 K-1
CN3 K-5
CN4 A-3
CN5 A-2
CN6 H-1
CN7 G-1
CN8 D-1
CN9 B-1

D1 F-2
D2 G-2
D3 F-3
D4 J-4
D5 K-4
D6 K-5
D7 K-3
D8 K-2
D9 K-3
D10 H-5
D11 G-5
D12 H-6
D13 B-4
D14 C-3
D15 A-2
D16 E-4

IC1 F-2
IC2 E-2
IC3 G-3
IC4 I-4
IC5 C-6
IC6 G-4
IC7 F-6
IC8 C-3
IC9 H-6

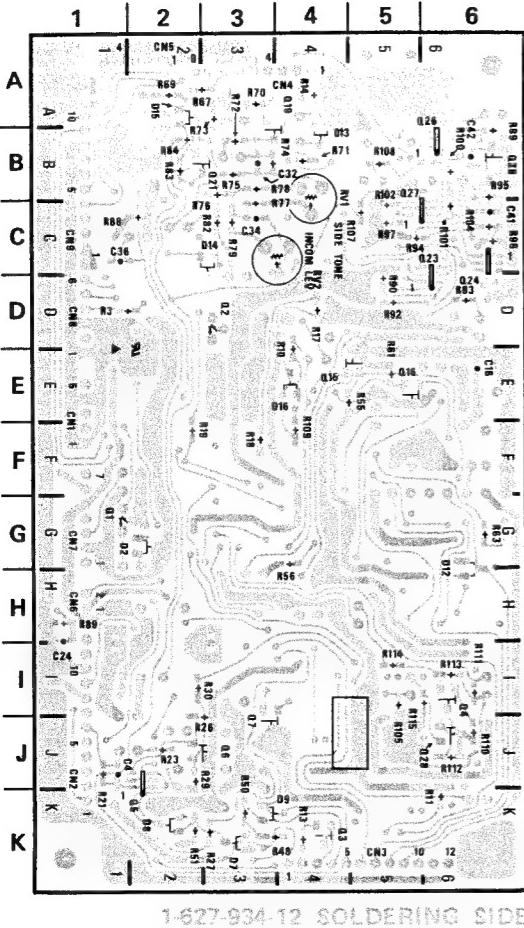
Q1 G-1
Q2 D-3
Q3 K-4
Q4 I-6
Q5 J-2
Q6 J-3
Q7 J-3
Q8 J-5
Q9 J-6
Q10 J-6
Q11 J-6
Q12 K-5
Q13 K-3
Q14 I-3
Q15 E-5
Q16 E-5
Q17 G-6
Q18 B-3
Q19 B-3
Q20 C-2
Q21 B-3
Q22 C-4
Q23 D-6
Q24 C-6
Q25 B-6
Q26 B-6
Q27 C-6
Q28 J-6

T1 B-6
T2 H-3



CN-277 BOARD

CA-13 (1-627-934-11,12)



1-627-934-12 SOLDERING SIDE

CN1 E-1
CN2 K-1
CN3 K-5
CN4 A-3
CN5 A-2
CN6 H-1
CN7 G-1
CN8 D-1
CN9 B-1

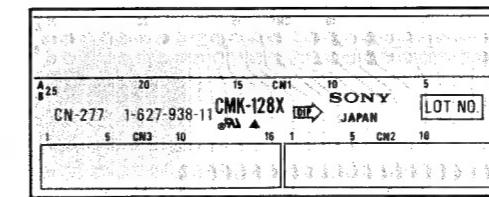
D1 F-2
D2 G-2
D3 F-3
D4 J-4
D5 K-4
D6 K-5
D7 K-3
D8 K-2
D9 K-3
D10 H-5
D11 G-5
D12 H-6
D13 B-4
D14 C-3
D15 A-2
D16 E-4

IC1 F-2
IC2 E-2
IC3 G-3
IC4 I-4
IC5 C-6
IC6 G-4
IC7 F-6
IC8 C-3
IC9 H-6

Q1 G-1
Q2 D-3
Q3 K-4
Q4 I-6
Q5 J-2
Q6 J-3
Q7 J-3
Q8 J-5
Q9 J-6
Q10 J-6
Q11 J-6
Q12 K-5
Q13 K-3
Q14 I-3
Q15 E-5
Q16 E-5
Q17 G-6
Q18 B-3
Q19 B-3
Q20 C-2
Q21 B-3
Q22 C-4
Q23 D-6
Q24 C-6
Q25 B-6
Q26 B-6
Q27 C-6
Q28 J-6

C-5 (b)

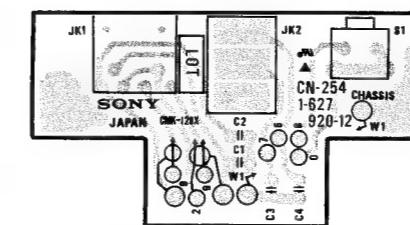
T1 B-6
T2 H-3



1-627-934-11 COMPONENT SIDE

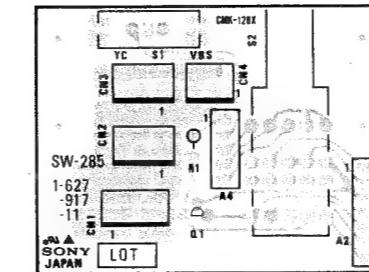
CN-254 BOARD

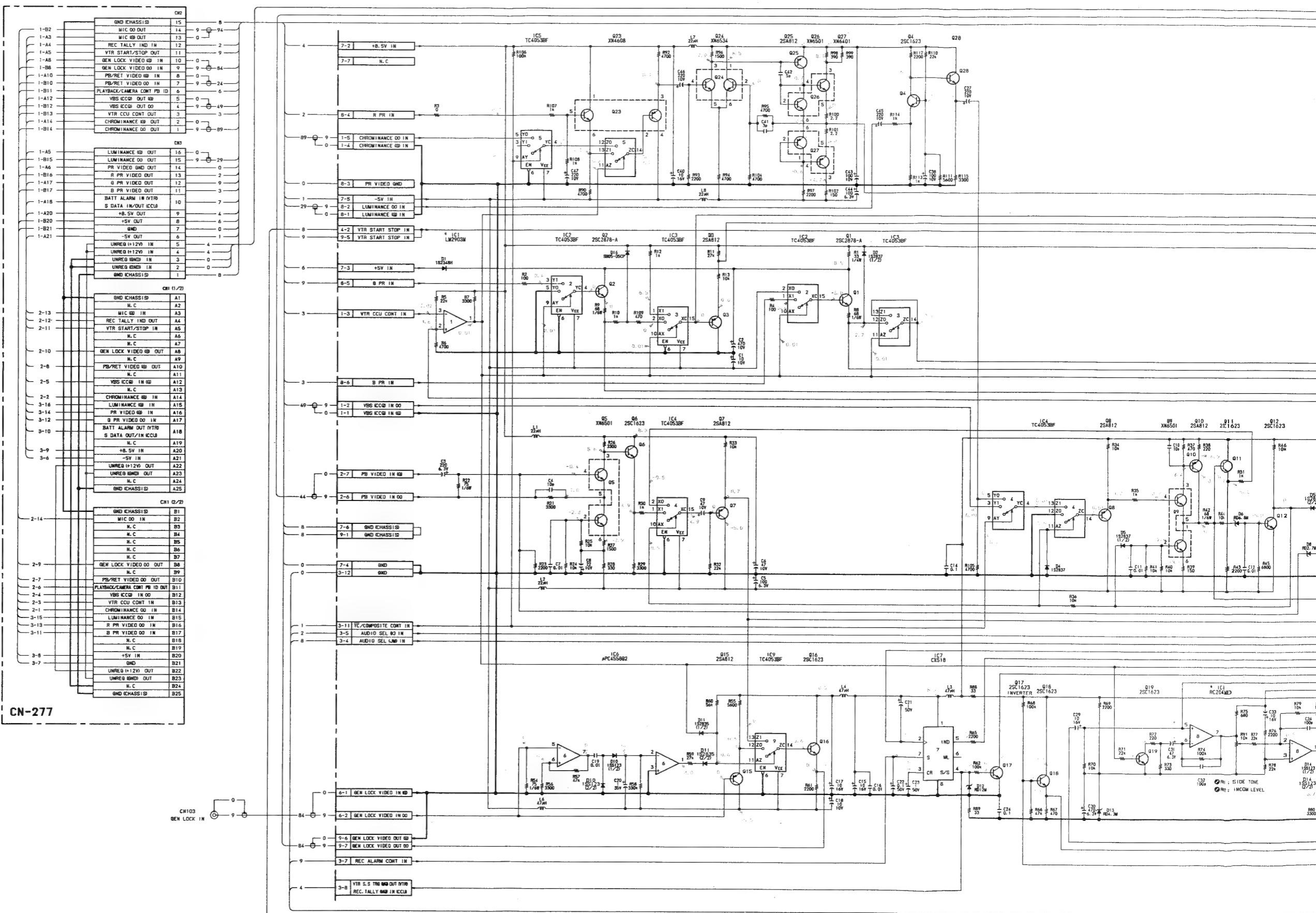
Ser. No. 11271- (UC)
30811- (J)
42081- (EK)

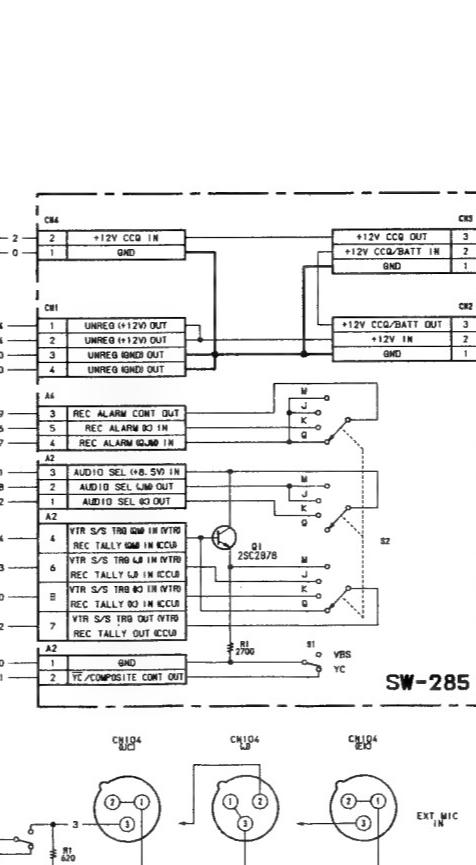
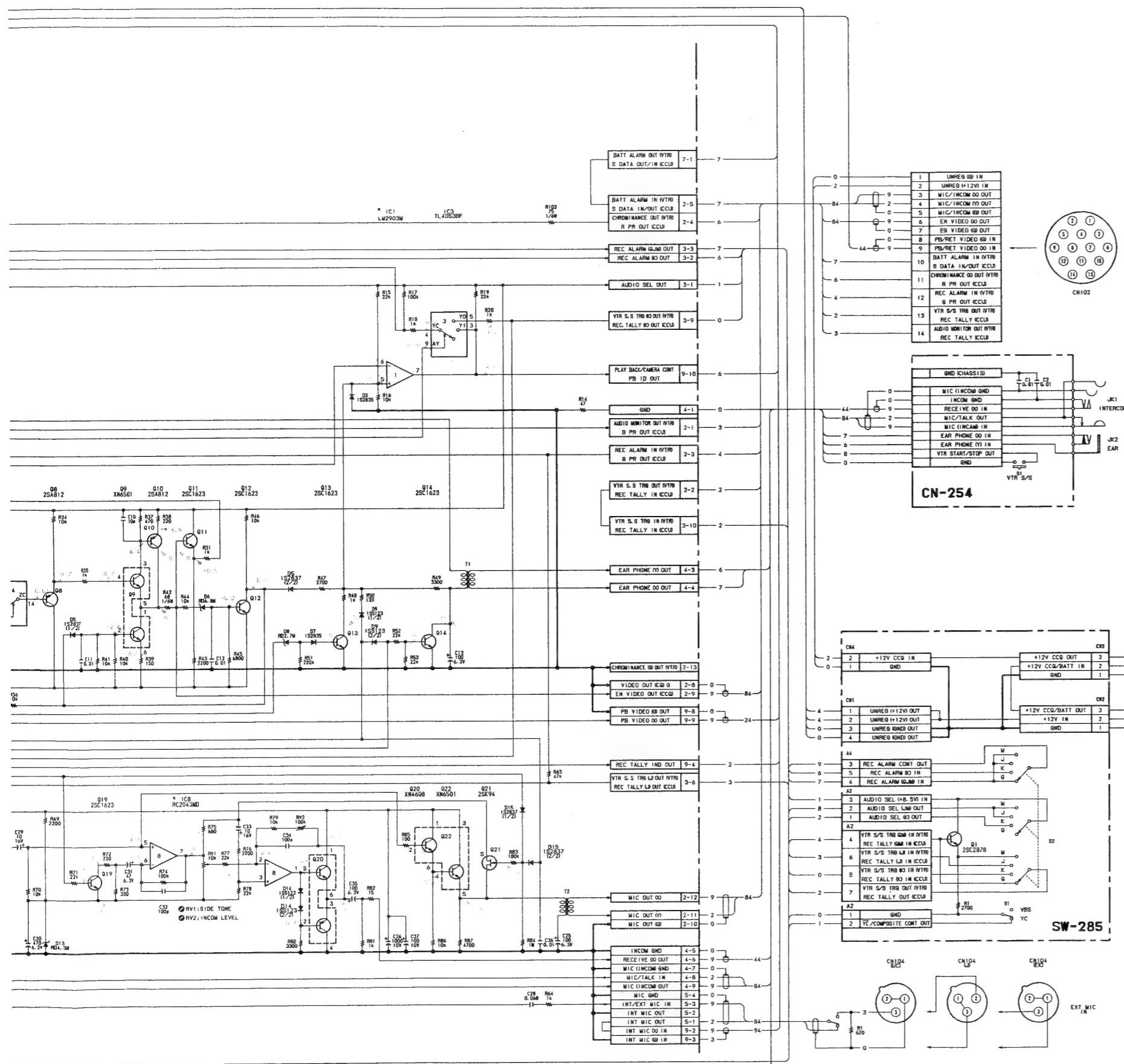


1-627-920-12 COMPONENT SIDE

SW-285 BOARD







No.	Parts No.	SP Description
1	A-6703-651-E	s CASE ASSY, BATTERY
2	A-7513-826-A	o MOUNTED CIRCUIT BOARD "CA-13"
3	X-3664-208-1	s KNOB ASSY, FADE
4	X-3717-701-4	o COVER ASSY, TOP, BATTERY
6	1-507-578-12	s JACK "EAR"
7	1-507-883-11	s JACK, SMALL TYPE 4P "INTERCOM"
8	1-508-942-12	s RECEPTACLE, 14P MALE "VTR/CCU/CMA"
9	1-552-665-11	s SWITCH, MICRO
10	1-554-088-41	s SWITCH, KEY BOARD "VTR START"
11	1-561-781-41	s RECEPTACLE, BNC "GEN LOCK"
12	1-563-096-11	s RECEPTACLE, 3P FEMALE (WITH SW) "MIC IN"
13	1-564-603-11	s RECEPTACLE, 4P MALE (WITH DC SW) "DC IN"
14	1-566-581-11	o RECEPTACLE, 5OP, FEMALE
15	1-570-491-11	s SWITCH, ROTARY "VTR"
16	1-627-917-11	o PRINTED CIRCUIT BOARD "SW-285"
17	1-627-920-11	o PRINTED CIRCUIT BOARD "CN-254"
18	1-627-938-11	o PRINTED CIRCUIT BOARD "CN-277"
19	1-571-767-11	s SWITCH, SLIDE "OUTPUT"
21	2-122-068-01	o PANEL, CA FRONT
22	2-122-073-01	o PANEL, CN
23	2-122-075-01	s COVER (LEFT)
24	2-122-076-01	s COVER (RIGHT)
25	2-132-225-01	o PLATE (CCQ), BLIND
26	2-132-226-01	o PLATE (MIC), BLIND
27	3-676-244-03	s COVER, SWITCH
28	3-680-604-11	o PLATE, BLIND
29	3-703-075-01	s CAP 2, SHAFT
30	3-717-707-02	o CUSHION (2)
31	3-717-708-01	o RETAINER, CASE
32	3-717-709-01	o SHAFT, LID
33	3-718-040-02	o COVER (1), BATTERY CASE
34	3-718-172-01	o RETAINER, HOOK

D-4. ELECTRICAL PARTS

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
CA-13 BOARD					
	A-7513-826-A	o MOUNTED CIRCUIT BOARD "CA-13"	CN1	1-506-470-11	o CONNECTOR, 5P, MALE
			CN2	1-506-477-11	o CONNECTOR, 12P, MALE
				1-562-157-11	o PLUG HOUSING, 12P
				1-564-026-00	o PLUG CONTACT
			CN3	1-506-477-11	o CONNECTOR, 12P, MALE
			CN4	1-506-474-11	o CONNECTOR, 9P, MALE
			CN5	1-506-469-11	o CONNECTOR, 4P, MALE
				1-562-149-11	o PLUG HOUSING, 4P
				1-564-026-00	o PLUG CONTACT
C1	1-131-377-00	s TANTALUM 10uF 10% 10V	CN6	1-506-467-11	o CONNECTOR, 2P, MALE
C2	1-124-472-11	s ELECT 470uF 20% 10V		1-562-147-11	o PLUG HOUSING, 2P
C3	1-126-176-11	s ELECT 220uF 20% 10V		1-564-026-00	o PLUG CONTACT
C4	1-163-093-00	s CERAMIC, CHIP 10PF 5% 50V	CN7	1-506-472-11	o CONNECTOR, 7P, MALE
C5	1-124-225-00	s ELECT 100uF 20% 6.3V	CN8	1-506-471-11	o CONNECTOR, 6P, MALE
C6	1-124-589-11	s ELECT 47uF 20% 16V	CN9	1-506-475-11	o CONNECTOR, 10P, MALE
C7	1-163-021-00	s CERAMIC, CHIP 0.01uF 5% 50V			
C8	1-124-638-11	s ELECT 22uF 20% 10V			
C9	1-124-589-11	s ELECT 47uF 20% 16V			
C10	1-163-093-00	s CERAMIC, CHIP 10PF 5% 50V			
C11	1-163-021-00	s CERAMIC, CHIP 0.01uF 5% 50V	D1	8-719-923-48	s 1S2348H
C12	1-163-021-00	s CERAMIC, CHIP 0.01uF 5% 50V	D2	8-719-100-05	s 1S2837
C13	1-124-225-00	s ELECT 100uF 20% 6.3V	D3	8-719-100-03	s 1S2835
C14	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V	D4	8-719-100-05	s 1S2837
C15	1-131-365-00	s TANTALUM 10uF 10% 20V	D5	8-719-100-05	s 1S2837
C16	1-163-021-00	s CERAMIC, CHIP 0.01uF 5% 50V	D6	8-719-106-16	s RD6.8M-B1
C17	1-131-365-00	s TANTALUM 10uF 10% 20V	D7	8-719-100-03	s 1S2835
C18	1-131-377-00	s TANTALUM 10uF 10% 10V	D8	8-719-105-32	s RD2.7M-B2
C19	1-163-021-00	s CERAMIC, CHIP 0.01uF 5% 50V	D9	8-719-101-23	s 1SS123
C20	1-131-347-00	s TANTALUM 1uF 10% 35V	D10	8-719-101-23	s 1SS123
C21	1-124-438-00	s ELECT 1MF 20% 50V	D11	8-719-100-03	s 1S2835
C22	1-124-463-00	s ELECT 0.1uF 20% 50V	D12	8-719-106-70	s RD12M-B1
C23	1-124-438-00	s ELECT 1MF 20% 50V	D13	8-719-105-63	s RD4.3M-B1
C24	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V	D14	8-719-101-23	s 1SS123
C25	1-124-225-00	s ELECT 100uF 20% 6.3V	D15	8-719-100-05	s 1S2837
			D16	8-719-938-75	s SB05-05CP
C26	1-124-473-11	s ELECT 1000uF 20% 10V			
C27	1-126-176-11	s ELECT 220uF 20% 10V			
C28	1-163-036-00	s CERAMIC, CHIP 0.068MF 50V	IC1	8-759-981-66	s LM2903M: RAYTHEON
C29	1-126-157-11	s ELECT 10uF 20% 16V	IC2	8-759-208-11	s TC4053BFHB: TOSHIBA
C30	1-124-472-11	s ELECT 470uF 20% 10V	IC3	8-759-208-11	s TC4053BFHB: TOSHIBA
C31	1-126-154-11	s ELECT 47uF 20% 6.3V	IC4	8-759-208-11	s TC4053BFHB: TOSHIBA
C32	1-163-117-00	s CERAMIC, CHIP 100PF 5% 50V	IC5	8-759-208-11	s TC4053BFHB: TOSHIBA
C33	1-126-157-11	s ELECT 10uF 20% 16V			
C34	1-163-117-00	s CERAMIC, CHIP 100PF 5% 50V	IC6	8-759-103-36	s UPC4558G2: NEC
C35	1-124-225-00	s ELECT 100uF 20% 6.3V	IC7	8-759-605-18	s CX518: SONY
			IC8	8-759-981-59	s RC2043MD: RAYTHEON
C36	1-163-021-00	s CERAMIC, CHIP 0.01uF 5% 50V	IC9	8-759-208-11	s TC4053BFHB: TOSHIBA
C37	1-124-584-00	s ELECT 100uF 20% 10V			
C38	1-124-584-00	s ELECT 100uF 20% 10V			
C40	1-131-365-00	s TANTALUM 10uF 10% 20V	L1	1-408-413-00	s 22uH
C41	1-163-086-00	s CERAMIC, CHIP 3PF 50V	L2	1-408-413-00	s 22uH
C42	1-163-088-00	s CERAMIC, CHIP 5PF 50V	L3	1-410-478-11	s 47uH
C43	1-124-584-00	s ELECT 100uF 20% 10V	L4	1-410-478-11	s 47uH
C44	1-124-225-00	s ELECT 100uF 20% 6.3V	L6	1-410-478-11	s 47uH
C45	1-126-176-11	s ELECT 220uF 20% 10V			
C46	1-126-176-11	s ELECT 220uF 20% 10V	L7	1-408-413-00	s 22uH
			L8	1-408-413-00	s 22uH
C47	1-126-176-11	s ELECT 220uF 20% 10V			

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
Q1	8-729-201-04	s 2SC2878-A	R16	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
Q2	8-729-201-04	s 2SC2878-A	R17	1-216-097-00	s METAL, CHIP 100K 5% 1/10W
Q3	8-729-100-75	s 2SA812-M5	R18	1-216-049-00	s METAL, CHIP 1K 5% 1/10W
Q4	8-729-100-66	s 2SC1623-L6	R19	1-216-081-00	s METAL, CHIP 22K 5% 1/10W
Q5	8-729-402-19	s XN6501	R20	1-216-049-00	s METAL, CHIP 1K 5% 1/10W
Q6	8-729-100-66	s 2SC1623-L6	R21	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
Q7	8-729-100-75	s 2SA812-M5	R22	1-215-394-00	s METAL 75 1% 1/6W
Q8	8-729-100-75	s 2SA812-M5	R23	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
Q9	8-729-402-19	s XN6501	R24	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
Q10	8-729-100-75	s 2SA812-M5	R25	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
Q11	8-729-100-66	s 2SC1623-L6	R26	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
Q12	8-729-100-66	s 2SC1623-L6	R27	1-216-053-00	s METAL, CHIP 1.5K 5% 1/10W
Q13	8-729-100-66	s 2SC1623-L6	R28	1-216-037-00	s METAL, CHIP 330 5% 1/10W
Q14	8-729-100-66	s 2SC1623-L6	R29	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
Q15	8-729-100-75	s 2SA812-M5	R30	1-216-049-00	s METAL, CHIP 1K 5% 1/10W
Q16	8-729-100-66	s 2SC1623-L6	R31	1-216-049-00	s METAL, CHIP 1K 5% 1/10W
Q17	8-729-100-66	s 2SC1623-L6	R32	1-216-081-00	s METAL, CHIP 22K 5% 1/10W
Q18	8-729-100-66	s 2SC1623-L6	R33	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
Q19	8-729-100-66	s 2SC1623-L6	R34	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
Q20	8-729-402-16	s XN4608	R35	1-216-049-00	s METAL, CHIP 1K 5% 1/10W
Q21	8-729-109-41	s 2SK94-X1	R36	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
Q22	8-729-402-19	s XN6501	R37	1-216-041-00	s METAL, CHIP 470 5% 1/10W
Q23	8-729-402-16	s XN4608	R38	1-216-033-00	s METAL, CHIP 220 5% 1/10W
Q24	8-729-403-34	s XN6534	R39	1-216-029-00	s METAL, CHIP 150 5% 1/10W
Q25	8-729-100-75	s 2SA812-M5	R40	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
Q26	8-729-402-19	s XN6501	R41	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
Q27	8-729-402-78	s XN6401	R42	1-215-393-00	s METAL 68 1% 1/6W
Q28	8-729-100-66	s 2SC1623-L6	R43	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
			R44	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
			R45	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R1	1-249-399-11	s CARBON 33 5% 1/4W	R46	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R2	1-216-025-00	s METAL, CHIP 100 5% 1/10W	R47	1-216-059-00	s METAL, CHIP 2.7K 5% 1/10W
R3	1-216-295-00	s METAL, CHIP 0-OHM 1/10W	R48	1-216-049-00	s METAL, CHIP 1K 5% 1/10W
R4	1-216-025-00	s METAL, CHIP 100 5% 1/10W	R49	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
R5	1-216-081-00	s METAL, CHIP 22K 5% 1/10W	R50	1-216-075-00	s METAL, CHIP 12K 5% 1/10W
R6	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W	R51	1-216-105-00	s METAL, CHIP 220K 5% 1/10W
R7	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W	R52	1-216-081-00	s METAL, CHIP 22K 5% 1/10W
R8	1-215-393-00	s METAL 68 1% 1/6W	R53	1-216-081-00	s METAL, CHIP 22K 5% 1/10W
R9	1-215-393-00	s METAL 68 1% 1/6W	R54	1-215-394-00	s METAL 75 1% 1/6W
R10	1-216-049-00	s METAL, CHIP 1K 5% 1/10W	R55	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R11	1-216-083-00	s METAL, CHIP 27K 5% 1/10W	R56	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
R12	1-216-049-00	s METAL, CHIP 1K 5% 1/10W	R57	1-216-089-00	s METAL, CHIP 47K 5% 1/10W
R13	1-216-073-00	s METAL, CHIP 10K 5% 1/10W	R58	1-216-109-00	s METAL, CHIP 330K 5% 1/10W
R14	1-216-017-00	s METAL, CHIP 47 5% 1/10W	R59	1-216-083-00	s METAL, CHIP 27K 5% 1/10W
R15	1-216-081-00	s METAL, CHIP 22K 5% 1/10W	R60	1-216-091-00	s METAL, CHIP 56K 5% 1/10W
			R61	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
			R62	1-216-097-00	s METAL, CHIP 100K 5% 1/10W
			R63	1-216-089-00	s METAL, CHIP 47K 5% 1/10W
			R64	1-216-049-00	s METAL, CHIP 1K 5% 1/10W
			R65	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
R66	1-216-089-00	s METAL, CHIP 47K 5% 1/10W	RV1	1-226-703-11	s METAL 10K
R67	1-216-041-00	s METAL, CHIP 470 5% 1/10W	RV2	1-226-775-11	s METAL 100K
R68	1-216-097-00	s METAL, CHIP 100K 5% 1/10W	T1	1-427-270-XX	s TRANSFORMER, OUTPUT
R69	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W	T2	1-427-487-00	s TRANSFORMER, OUTPUT
R70	1-216-073-00	s METAL, CHIP 10K 5% 1/10W			
R71	1-216-081-00	s METAL, CHIP 22K 5% 1/10W			
R72	1-216-033-00	s METAL, CHIP 220 5% 1/10W			
R73	1-216-037-00	s METAL, CHIP 330 5% 1/10W			
R74	1-216-097-00	s METAL, CHIP 100K 5% 1/10W			
R75	1-216-045-00	s METAL, CHIP 680 5% 1/10W			
R76	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W			
R77	1-216-081-00	s METAL, CHIP 22K 5% 1/10W			
R78	1-216-081-00	s METAL, CHIP 22K 5% 1/10W			
R79	1-216-073-00	s METAL, CHIP 10K 5% 1/10W			
R80	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W			
R81	1-216-049-00	s METAL, CHIP 1K 5% 1/10W			
R82	1-216-005-00	s METAL, CHIP 15 5% 1/10W			
R83	1-216-097-00	s METAL, CHIP 100K 5% 1/10W	C1	1-161-051-00	s CERAMIC 0.01uF 10% 50V
R84	1-216-121-00	s METAL, CHIP 1M 5% 1/10W	C2	1-161-051-00	s CERAMIC 0.01uF 10% 50V
R85	1-216-025-00	s METAL, CHIP 100 5% 1/10W	C3	1-161-051-00	s CERAMIC 0.01uF 10% 50V
R86	1-216-073-00	s METAL, CHIP 10K 5% 1/10W	C4	1-161-051-00	s CERAMIC 0.01uF 10% 50V
R87	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W			
R88	1-216-013-00	s METAL, CHIP 33 5% 1/10W			
R89	1-216-013-00	s METAL, CHIP 33 5% 1/10W			
R90	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W	CN4	1-562-154-11	o HOUSING 9P
R92	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W			
R93	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W	JK1	1-507-883-00	s JACK, SMALL TYPE 4P
R94	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W	JK2	1-566-740-11	s JACK
R95	1-216-667-11	s METAL, CHIP 4.7K 0.5%			
R96	1-216-053-00	s METAL, CHIP 1.5K 5% 1/10W	S1	1-554-088-00	s SWITCH, TACTILE
R97	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W			
R98	1-216-039-00	s METAL, CHIP 390 5% 1/10W			
R99	1-216-039-00	s METAL, CHIP 390 5% 1/10W			
R100	1-216-298-00	s METAL, CHIP 2.2 5% 1/10W			
R101	1-216-298-00	s METAL, CHIP 2.2 5% 1/10W			
R102	1-216-029-00	s METAL, CHIP 150 5% 1/10W			
R103	1-215-394-00	s METAL 75 1% 1/6W			
R104	1-216-667-11	s METAL, CHIP 4.7K 0.5%			
R105	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W			
R106	1-216-097-00	s METAL, CHIP 100K 5% 1/10W			
R107	1-216-049-00	s METAL, CHIP 1K 5% 1/10W			
R108	1-216-049-00	s METAL, CHIP 1K 5% 1/10W			
R109	1-216-041-00	s METAL, CHIP 470 5% 1/10W	CN1	1-562-150-11	o HOUSING 5P
R110	1-216-081-00	s METAL, CHIP 22K 5% 1/10W	CN1	1-566-581-11	o RECEPTACLE, MULTI CONNECTOR 50P
R111	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W	CN5	1-562-149-11	o HOUSING 4P
R112	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W	CN7	1-562-152-11	o HOUSING, CONNECTOR 7P
R113	1-216-049-00	s METAL, CHIP 1K 5% 1/10W	CN8	1-562-151-11	o HOUSING 6P
R114	1-216-049-00	s METAL, CHIP 1K 5% 1/10W	CN9	1-562-155-11	o PLUG HOUSING, 10P
R115	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W			

Ref. No. Part No. SP Description

SW-285 BOARD

1-627-917-11 o PRINTED CIRCUIT BOARD
"SW-285"

1-562-738-11 o HOUSING, CONNECTOR 5P
1-564-026-00 s CONTACT, FEMALE, AWG24-30
1-564-831-11 o CONTACT, CONNECTOR

CN1 1-506-469-21 o CONNECTOR, 4P, MALE
CN2 1-506-702-11 o CONNECTOR POST HEADER, ILG (3P)
1-561-515-00 o PLUG HOUSING, 3P
1-560-372-00 o PLUG CONTACT
CN3 1-506-702-11 o CONNECTOR POST HEADER, ILG (3P)
1-561-515-00 o PLUG HOUSING, 3P
1-560-372-00 o PLUG CONTACT
CN4 1-560-356-00 o CONNECTOR POST HEADER, ILG (2P)
1-561-514-00 o PLUG HOUSING, 2P
1-560-372-00 o PLUG CONTACT

Q1 8-729-201-04 s 2SC2878-A

R1 1-249-422-11 s CARBON 2.7K 5% 1/4W

S1 1-571-767-11 s SWITCH, SLIDE
S2 1-570-491-11 s SWITCH, ROTARY

FRAME

CN102 1-508-942-00 s CONNECTOR, 14P
CN103 1-561-781-31 s BNC (RECEPTACLE)
CN104 1-563-096-11 s CONNECTOR (WITH SW) F 3P
CN105 1-564-603-11 s CONNECTOR (WITH DC SW) 4P

R1 1-247-826-00 s CABON 620

SW101 1-552-665-00 s MICRO "BATT IN"

1.5INCH ELECTRONIC VIEWFINDER



SPECIFICATIONS

Picture tube	1.5-inch monochrome
Indicators	REC/TALLY indicator BATT Indicator SHUTTER indicator GAIN UP indicator
Resolution	400 lines
Power requirements	12 V DC
Power consumption	2.3 W
Weight	Approx. 500 g (1 lb 2 oz)
Dimensions	Approx. 186 × 63 × 189 mm (w/h/d) (7⅓ × 2⅓ × 7⅓ inches)
Supplied accessory	Operating Instructions (1)

Design and specifications are subject to change without notice.

SONY®
SERVICE MANUAL

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Overall A-1

B. SEMICONDUCTOR

Semiconductor B-1

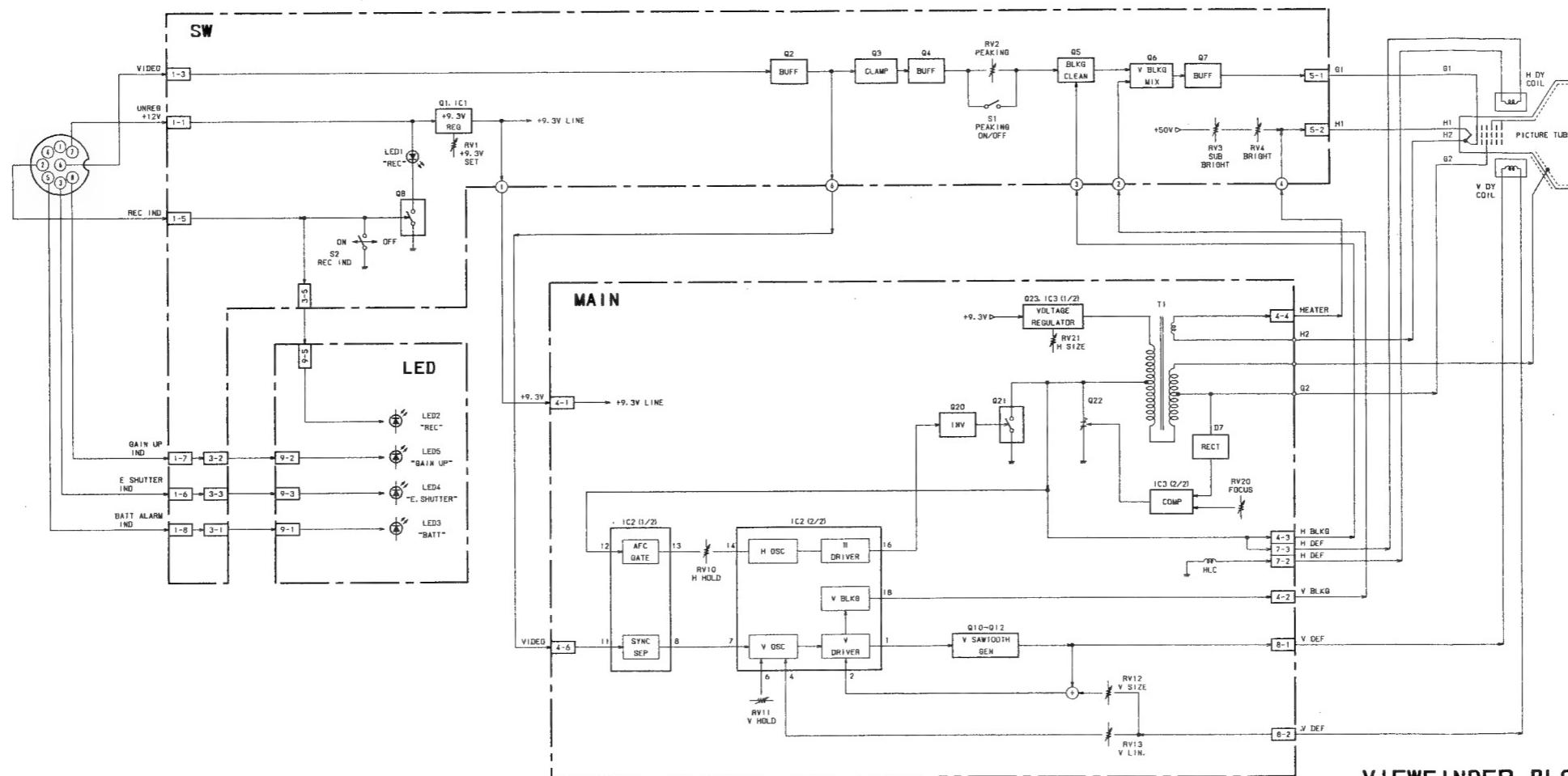
C. SCHEMATIC DIAGRAM AND BOARD ILLUSTRATION

MAIN ———
SW ——— C-3
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D. SPARE PARTS

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D-3. Exploded View D-3
D-4. Electrical Parts List D-5

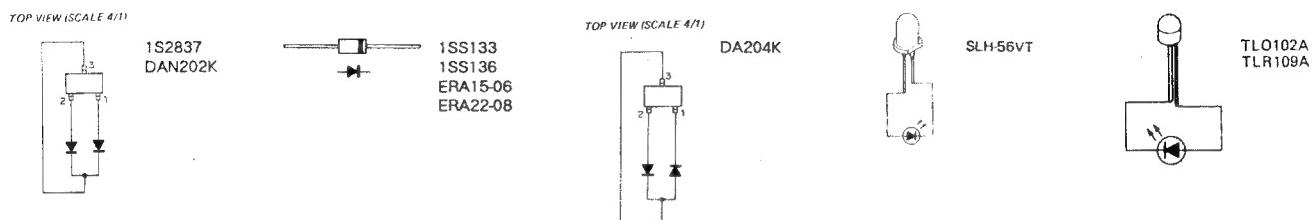
SECTION A
BLOCK DIAGRAM



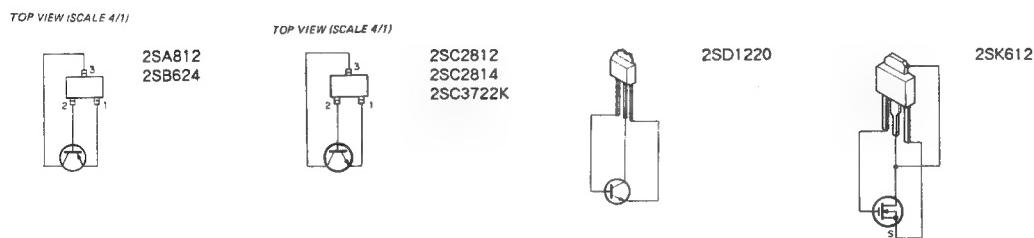
SECTION B SEMICONDUCTOR PIN ASSIGNMENTS

The circuit diagram of IC is obtained from the IC data book published by the manufacturer.

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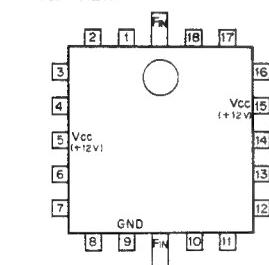


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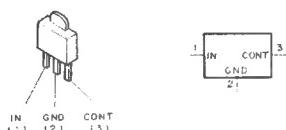


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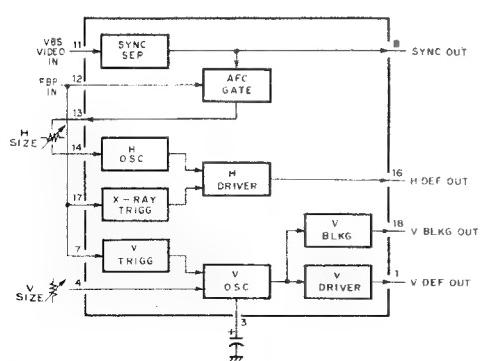
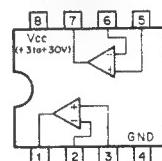
HA11423MP (HITACHI) FLAT PACKAGE
TV H/V SYNC SIGNAL PROCESSOR
- TOP VIEW -



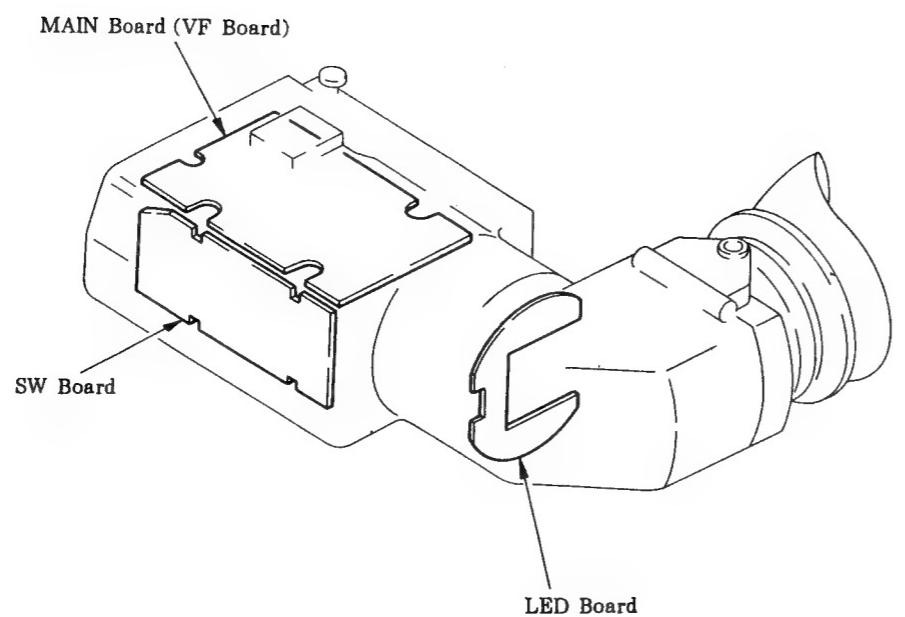
M5236ML (MITSUBISHI)
ADJUSTABLE VOLTAGE REGULATOR



uPC358G2 (NEC) FLAT PACKAGE
DUAL OPERATIONAL AMPLIFIERS
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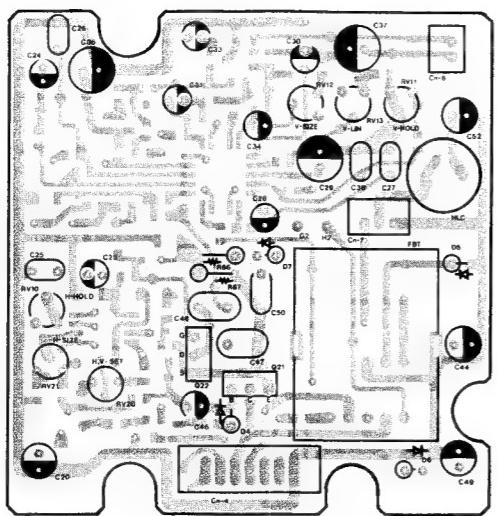
SECTION C
SCHEMATIC DIAGRAMS AND BOARD ILLUSTRATIONS



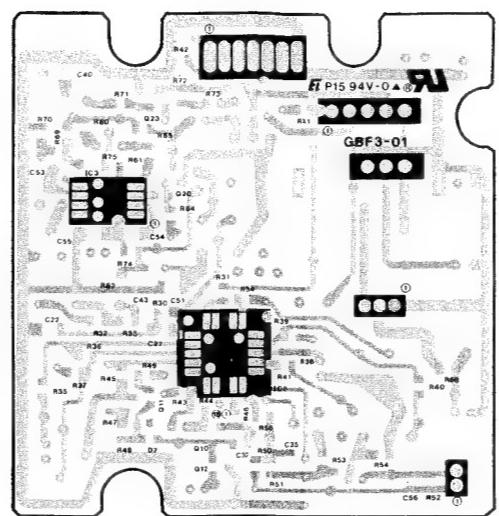
MAIN, SW, LED

MAIN, SW, LED

MAIN BOARD

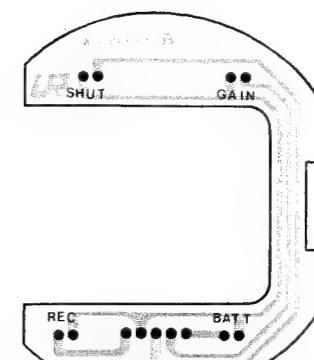


COMPONENT SIDE



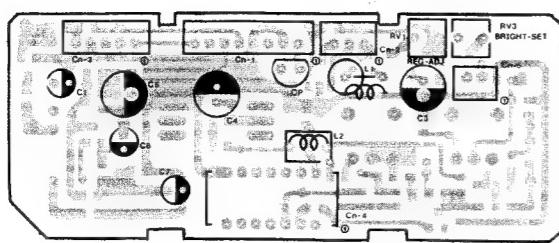
SOLDERING SIDE

LED BOARD

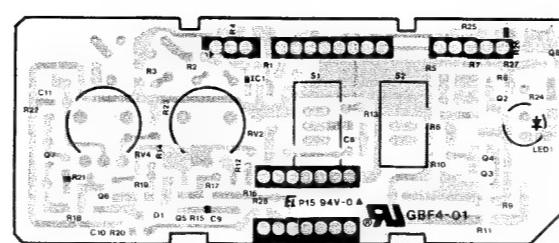


COMPONENT SIDE

SW BOARD



COMPONENT SIDE

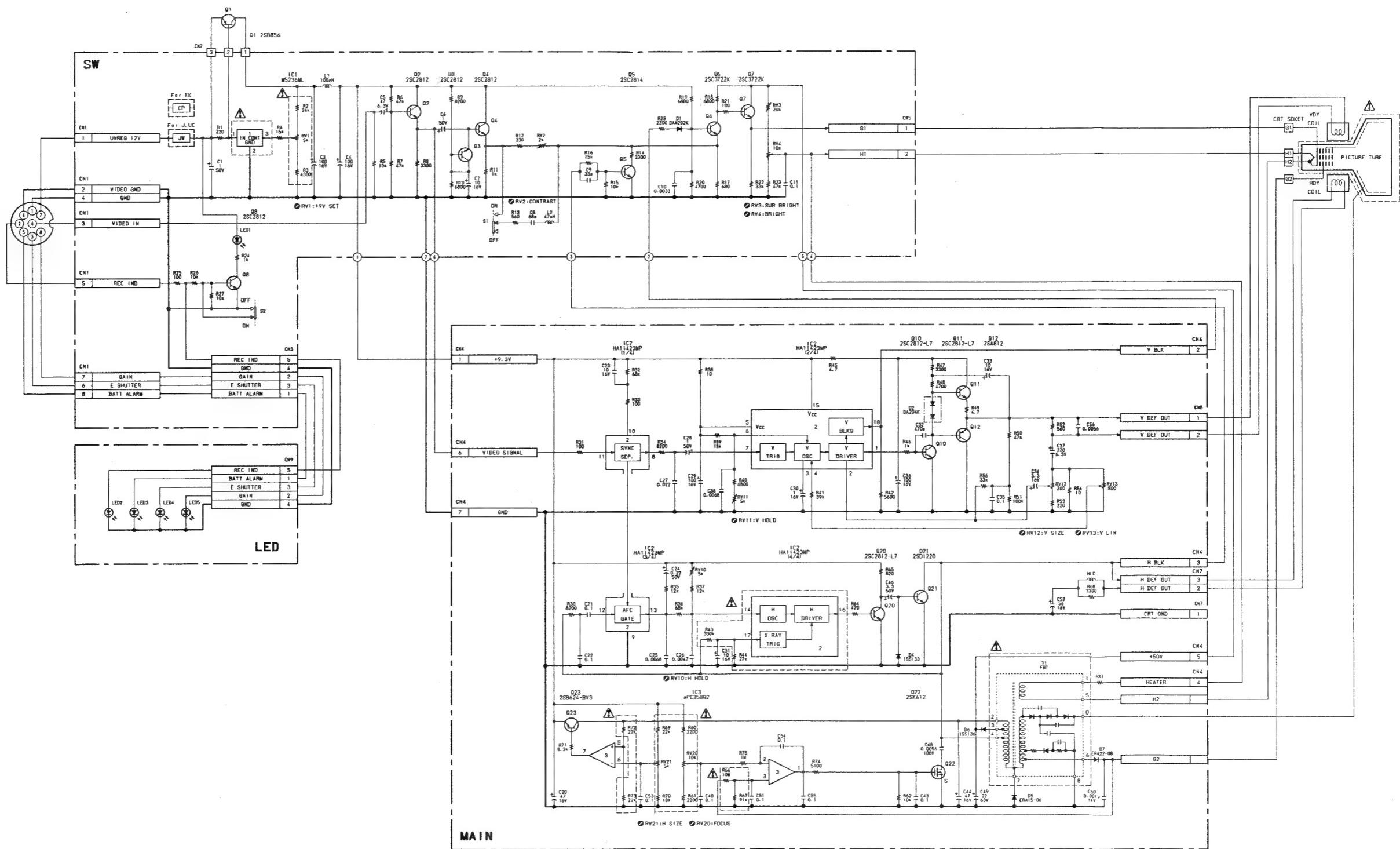


SOLDERING SIDE

C-3

C-4

DXF-325 (J, UC)
DXF-325CE (EK)



SECTION D SPARE PARTS

D-1. PARTS INFORMATION

1. Safety Related Component Warning

Components identified by shading marked with ! on the schematic diagrams, exploded views and electrical spare parts list are critical to safe operation. Replace these components with Sony parts whose parts numbers appear as shown in this manual or in service manual supplements published by Sony.

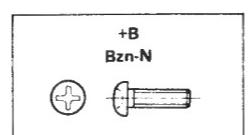
2. Replacement Parts supplied from Sony Parts Center will sometimes have different shape and outside view from the parts which actually in use. This is due to "accommodating the improved parts and/or engineering changes" or "standardization of genuine parts." This manual's exploded view and electrical spare parts lists are indicating the parts numbers of "the standardized genuine parts at present." Regarding engineering parts and diagrams changes in our engineering department, refer SONY service bulletins and service manual supplements.
3. The parts marked with "S" in the SP column of the exploded views and electrical spare parts list are normally required for routine service work. Orders for parts marked with "0" will be processed, but allow for additional delivery time.
4. Item with no parts number and/or no description are not stocked because they are seldom required for routine service.

5. Abbreviation

REF. No.	DESCRIPTION	REF. No.	DESCRIPTION	REF. No.	DESCRIPTION
C	CAPACITOR	IC	IC	RP	RESISTOR BLOCK
CN	CONNECTOR	J	JACK	RV	VARIABLE RESISTOR
CV	VARIABLE CAPACITOR	L	INDUCTOR	S	SWITCH
D	DIODE	LV	VARIABLE INDUCTOR	T	TRANSFORMER
DL	DELAY LINE	Q	TRANSISTOR	X	OSCILLATOR
FL	FILTER	R	RESISTOR		

All capacitors are in micro farads unless otherwise specified.
 All inductors are in micro henries unless otherwise specified.
 All resistors are in ohms.

D-2. SCREWS



SIZE	Parts No.
2 x 3	772-00
x 4	772-10
x 5	772-20
x 6	772-30
x 8	772-40
x 10	772-50
x 12	772-60
x 14	772-70
x 16	772-80
x 20	—
x 30	555-09

SIZE	Parts No.
2.6 x 3	775-00
x 4	775-10
x 5	775-20
x 6	773-95
x 8	775-40
x 10	775-50
x 12	775-60
x 14	775-70
x 16	775-80
x 20	775-90

SIZE	Parts No.
4 x 4	558-09
x 5	559-09
x 6	560-09
x 8	561-09
x 10	562-09
x 12	563-09
x 14	564-09
x 16	565-09
x 20	566-09

SIZE	Parts No.
5 x 8	574-09
x 10	575-09
x 12	576-09
x 14	577-09
x 16	578-09
x 20	579-09

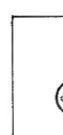
SIZE	Parts No.
3 x 6	947-01
x 8	948-01
x 10	949-01
x 12	950-01
x 14	951-01
x 16	952-01
x 20	953-01
x 25	954-01
x 30	955-01
x 35	956-01
x 40	957-01

SIZE	Parts No.
2 x 3	772-08
x 4	772-18
x 5	771-06
x 6	772-38
x 8	772-48
x 10	772-58
x 12	772-68
x 14	772-78
x 16	772-88
x 20	—

SIZE	Parts No.
2.6 x 3	775-08
x 4	773-86
x 5	770-87
x 6	770-67
x 8	770-99
x 10	773-87
x 12	775-68
x 14	775-78
x 16	775-88
x 20	773-91

SIZE	Parts No.
4 x 4	558-04
x 5	559-04
x 6	560-04
x 8	561-04
x 10	562-04
x 12	563-04
x 14	564-04
x 16	565-04
x 20	566-04

SIZE	Parts No.
5 x 8	574-04
x 10	575-04
x 12	576-04
x 14	577-04
x 16	578-04
x 20	579-04



SIZE	Parts No.
3 x 3	544-09
x 4	545-09
x 5	546-09
x 6	547-09
x 8	548-09
x 10	549-09
x 12	550-09
x 14	551-09
x 16	552-09
x 20	553-09
x 30	555-09

SIZE	Parts No.
4 x 4	558-09
x 5	559-09
x 6	560-09
x 8	561-09
x 10	562-09
x 12	563-09
x 14	564-09
x 16	565-09
x 20	566-09

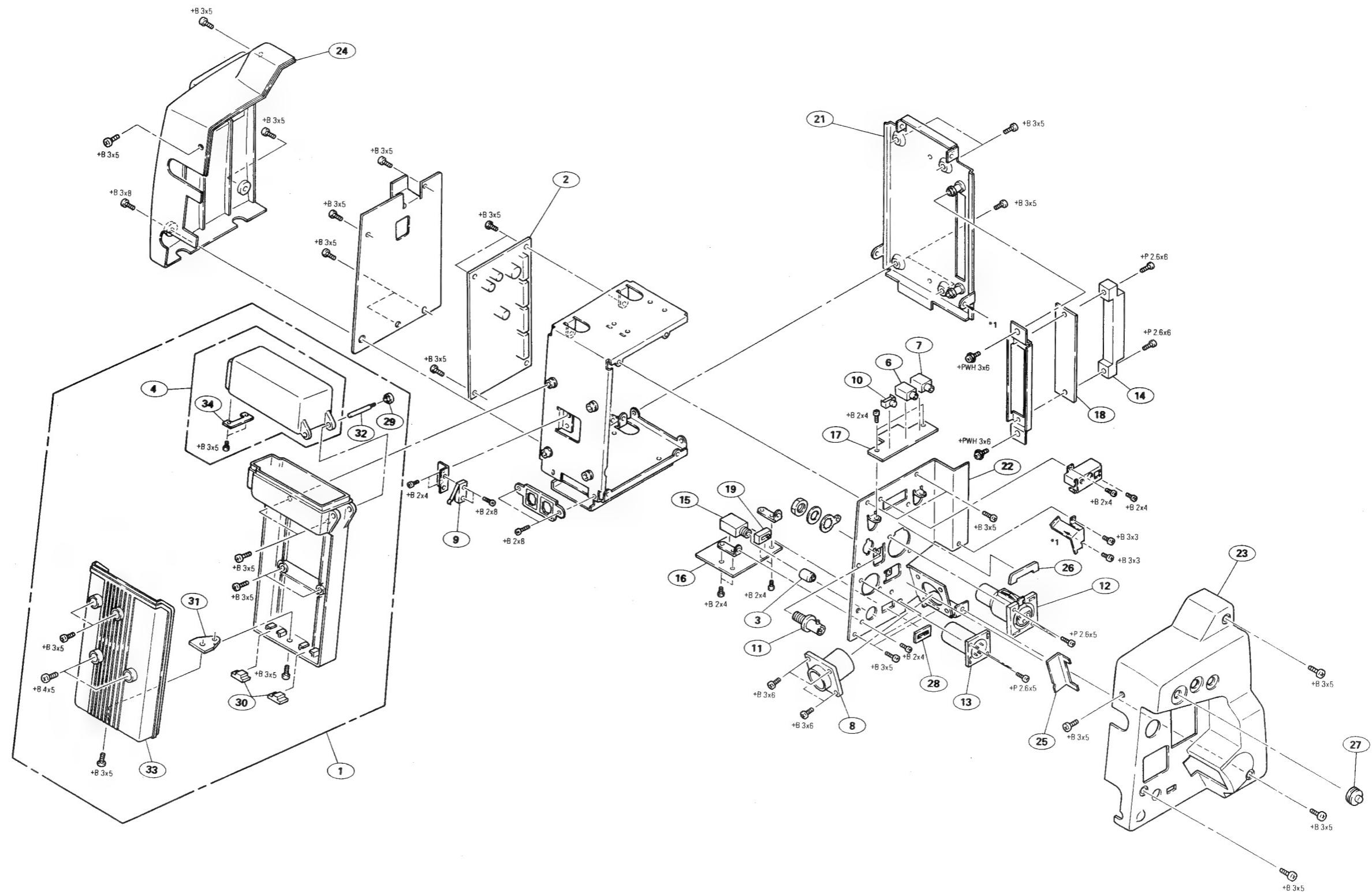
SIZE	Parts No.
5 x 8	574-09
x 10	575-09
x 12	576-09
x 14	577-09
x 16	578-09
x 20	579-09

SIZE	Parts No.
3 x 6	947-01
x 8	948-01
x 10	949-01
x 12	950-01
x 14	951-01
x 16	952-01
x 20	953-01
x 25	954-01
x 30	955-01
x 35	956-01
x 40	957-01

SIZE	Parts No.
2 x 3	772-08
x 4	772-18
x 5	771-06
x 6	772-38
x 8</	

EXPLODED VIEW

EXPLODED VIEW



D-3

D-4

CA-325(UC)
CA-325P(EK)

SECTION D SPARE PARTS

D-1. PARTS INFORMATION

1. Safety Related Component Warning

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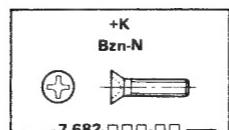
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5. Abbreviation

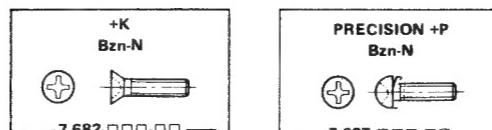
REF. No.	DESCRIPTION	REF. No.	DESCRIPTION	REF. No.	DESCRIPTION
C	CAPACITOR	IC	IC	RP	RESISTOR BLOCK
CN	CONNECTOR	J	JACK	RV	VARIABLE RESISTOR
CV	VARIABLE CAPACITOR	L	INDUCTOR	S	SWITCH
D	DIODE	LV	VARIABLE INDUCTOR	T	TRANSFORMER
DL	DELAY LINE	Q	TRANSISTOR	X	OSCILLATOR
FL	FILTER	R	RESISTOR		

All capacitors are in micro farads unless otherwise specified.
 All inductors are in micro henries unless otherwise specified.
 All resistors are in ohms.

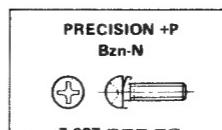
D-2. SCREWS



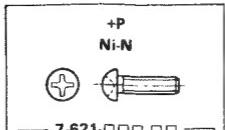
SIZE	Parts No.
3 x 4	245-09
x 5	246-09
x 6	247-09
x 8	248-09
x 10	249-09
x 12	250-09
x 14	251-09
x 16	252-09
x 20	253-09
4 x 6	260-09
x 8	261-09
x 10	262-09
x 12	263-09
x 14	264-09
x 16	265-09
x 20	266-09



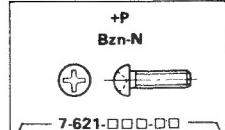
SIZE	Parts No.
1.7 x 1.6	552-18
x 1.8	-
x 2	552-28
x 2.2	-
x 2.5	552-08
x 2.8	-
x 3	552-38
x 3.5	552-78
x 4	552-48
x 4.5	-
x 5	552-58
x 5.5	-
x 6	-
2 x 1.8	554-38
x 2	553-18
x 2.2	-
x 2.5	553-28
x 2.8	554-58
x 3	553-38
x 3.5	554-18
x 4	553-48
x 5	553-58
x 6	554-28
x 8	-
x 10	-
x 12	-
x 14	-
x 16	-
x 20	-



SIZE	Parts No.
2 x 3	255-12
x 4	255-22
x 5	255-32
x 6	255-42
x 8	255-52
x 10	255-62
x 12	255-72
x 14	-
x 16	-
x 20	-

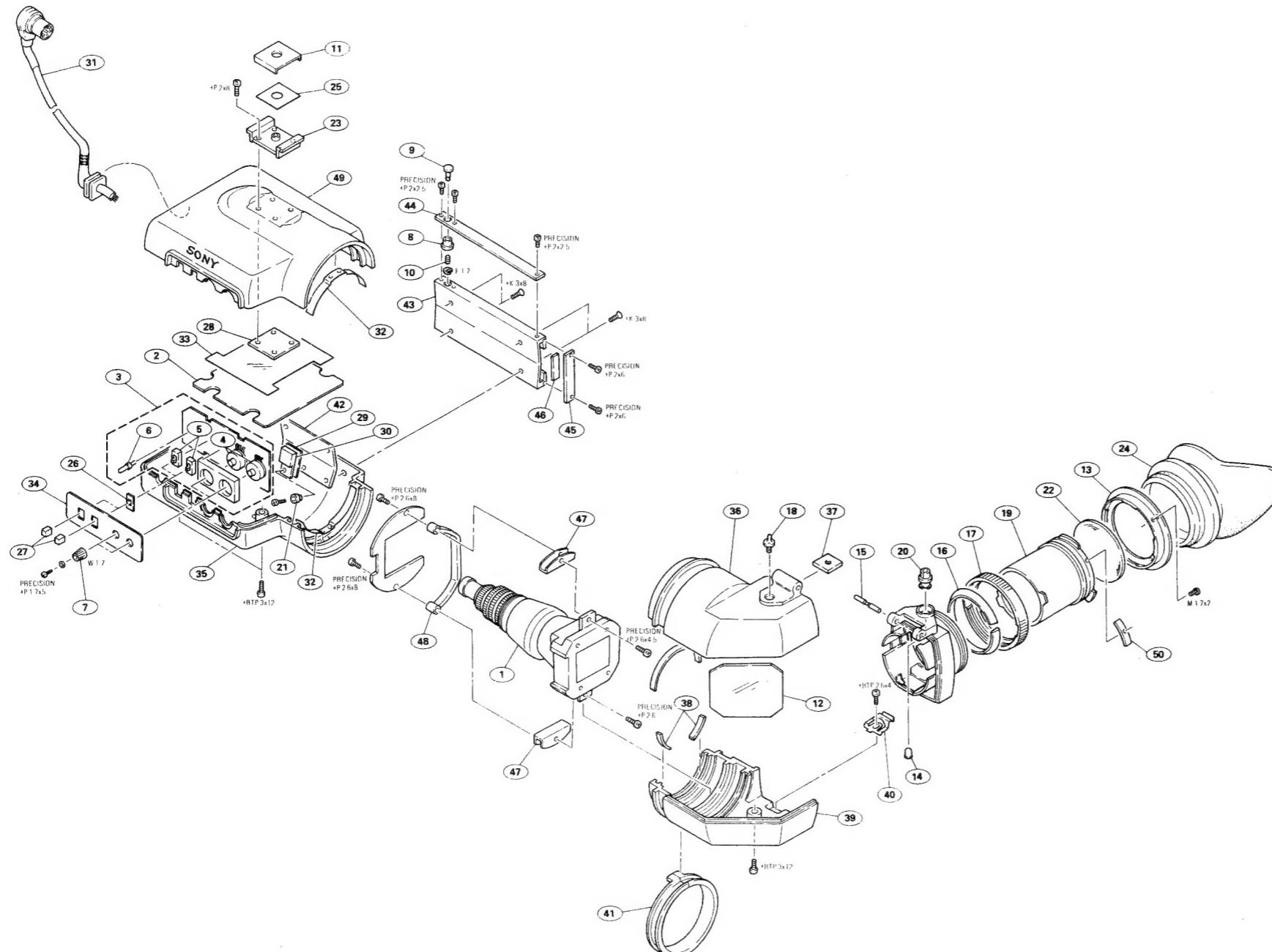


SIZE	Parts No.
2.6 x 4	531-19
x 5	532-19
x 6	533-19
x 8	534-19
x 10	535-19
x 12	536-19
x 14	537-19
x 16	538-19
3 x 5	544-19
x 6	545-19
3 x 8	546-19
x 10	547-19
x 12	548-19
x 14	549-19
x 16	550-19
x 20	551-19
x 25	552-19
x 30	553-19
x 35	554-19
x 40	555-19
x 45	556-19
x 50	596-19
x 60	-



SIZE	Parts No.
2 x 3	255-10
x 4	255-20
x 5	283-00
x 6	255-40
x 8	255-50
x 10	283-10
x 12	283-70
x 14	-
x 16	-
x 20	256-20
2.3 x 5	-
x 6	-
x 8	-
x 10	-
x 12	-
x 14	-
x 16	-
x 20	-

D-3. EXPLODED VIEW



No. Parts No. SP Description

1	1-546-078-11	s CRT/DY ASSY
2	1-589-128-11	o MAIN BOARD
3	1-589-129-11	o SW BOARD (FOR UC)
4	1-589-129-21	o SW BOARD (FOR EK)
5	1-230-075-11	s CARBON 2K "CONTR" "BRIGHT"
	1-570-845-11	s SWITCH, SLIDE "PEAKING ON/OFF" "TALLY ON/OFF"
6	1-994-802-01	s LED, SLH-56VT
7	2-277-453-00	o KNOB, CONTROL
8	2-277-456-00	o COLLER, STOPPER
9	2-277-457-00	s KNOB, STOPPER
10	2-277-466-01	o SPRING, COMPRESSION
11	2-277-468-00	o PLATE, ORNAMENTAL, CAMERA SHOE
12	2-381-411-00	o MIRROR
13	2-381-426-02	o RING, LENS
14	2-381-461-02	s PIN, BLIND
15	2-381-462-01	o PIN
16	2-381-466-01	o RING, RETAINER
17	2-381-467-01	o RING (2), LENS
18	2-381-468-01	s PIN, STOPPER
19	2-381-470-02	o HOLDER, LENS
20	2-381-472-02	o STOPPER
21	2-832-007-00	s BUSHING (K), INSULATING
22	3-657-626-00	o LUPE, VF
23	3-657-700-00	s BRACKET, ACCESSORY
24	3-657-771-02	s EYECUP (2)
25	3-672-213-00	o SHEET, ADHESIVE
26	3-680-604-01	o PLATE, BLIND
27	3-680-605-00	o CAP, SLIDE
28	3-688-709-01	o NUT, PLATE, SHOE
29	3-703-037-00	s INSULATOR, TO-220
30	8-829-315-63	s TRANSISTOR, 2SB856
31	9-994-797-01	s CABLE, VF
32	9-994-811-01	o SPRING, PLATE
33	9-994-812-01	o INSULATOR
34	9-994-813-01	o LABEL, SW
35	9-994-814-01	o CASE, BOTTOM
36	9-994-815-01	o HOLDER T, OUTSIDE
37	9-994-816-01	o PLATE, NUT
38	9-994-817-01	o MOLT
39	9-994-818-01	o HOLDER B, OUTSIDE
40	9-994-819-01	o PIN, LOCK
41	9-994-820-01	o LING, SLIDE
42	9-994-821-01	o NUT, PLATE, CASE
43	9-994-822-01	o GUIDE, VF SLIDE
44	9-994-823-01	o LABEL, SLIDE
45	9-994-824-01	o STOPPER
46	9-994-825-01	o RUBBER, STOPPER
47	9-994-826-01	o STOPPER, PWB
48	9-994-827-01	o COLLER
49	9-998-810-00	o CASE, TOP
50	2-381-493-01	o PLATE, STOPPER

Ser No. 30981 and higher (J)
12091 and higher (UC)
42851 and higher (EK)

D-4. ELECTRICAL PARTS

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
RESISTOR, CHIP					
1/10W			1-216-083-00	s RES, CHIP	27k 5% 1/10W
0 - 3.3M (E12) +-5% 1/10W			1-216-085-00	s RES, CHIP	33k 5% 1/10W
1-216-295-00	s RES, CHIP	0 5% 1/10W	1-216-087-00	s RES, CHIP	39k 5% 1/10W
1-216-298-00	s RES, CHIP	2.2 5% 1/10W	1-216-089-00	s RES, CHIP	47k 5% 1/10W
1-216-302-00	s RES, CHIP	2.7 5% 1/10W	1-216-091-00	s RES, CHIP	56k 5% 1/10W
1-216-304-00	s RES, CHIP	3.3 5% 1/10W	1-216-093-00	s RES, CHIP	68k 5% 1/10W
1-216-306-00	s RES, CHIP	3.9 5% 1/10W	1-216-095-00	s RES, CHIP	82k 5% 1/10W
1-216-308-00	s RES, CHIP	4.7 5% 1/10W	1-216-097-00	s RES, CHIP	100k 5% 1/10W
1-216-309-00	s RES, CHIP	5.6 5% 1/10W	1-216-099-00	s RES, CHIP	120k 5% 1/10W
1-216-311-00	s RES, CHIP	6.8 5% 1/10W	1-216-101-00	s RES, CHIP	150k 5% 1/10W
1-216-313-00	s RES, CHIP	8.2 5% 1/10W	1-216-103-00	s RES, CHIP	180k 5% 1/10W
1-216-001-00	s RES, CHIP	10 5% 1/10W	1-216-105-00	s RES, CHIP	220k 5% 1/10W
1-216-003-00	s RES, CHIP	12 5% 1/10W	1-216-107-00	s RES, CHIP	270k 5% 1/10W
1-216-005-00	s RES, CHIP	15 5% 1/10W	1-216-109-00	s RES, CHIP	330k 5% 1/10W
1-216-007-00	s RES, CHIP	18 5% 1/10W	1-216-111-00	s RES, CHIP	390k 5% 1/10W
1-216-009-00	s RES, CHIP	22 5% 1/10W	1-216-113-00	s RES, CHIP	470k 5% 1/10W
1-216-011-00	s RES, CHIP	27 5% 1/10W	1-216-115-00	s RES, CHIP	560k 5% 1/10W
1-216-013-00	s RES, CHIP	33 5% 1/10W	1-216-117-00	s RES, CHIP	680k 5% 1/10W
1-216-015-00	s RES, CHIP	39 5% 1/10W	1-216-119-00	s RES, CHIP	820k 5% 1/10W
1-216-017-00	s RES, CHIP	47 5% 1/10W	1-216-121-00	s RES, CHIP	1.0M 5% 1/10W
1-216-019-00	s RES, CHIP	56 5% 1/10W	1-216-123-00	s RES, CHIP	1.2M 5% 1/10W
1-216-021-00	s RES, CHIP	68 5% 1/10W	1-216-125-00	s RES, CHIP	1.5M 5% 1/10W
1-216-023-00	s RES, CHIP	82 5% 1/10W	1-216-127-00	s RES, CHIP	1.8M 5% 1/10W
1-216-025-00	s RES, CHIP	100 5% 1/10W	1-216-129-00	s RES, CHIP	2.2M 5% 1/10W
1-216-027-00	s RES, CHIP	120 5% 1/10W	1-216-131-00	s RES, CHIP	2.7M 5% 1/10W
1-216-029-00	s RES, CHIP	150 5% 1/10W	1-216-133-00	s RES, CHIP	3.3M 5% 1/10W
1-216-031-00	s RES, CHIP	180 5% 1/10W			
1-216-033-00	s RES, CHIP	220 5% 1/10W			
1-216-035-00	s RES, CHIP	270 5% 1/10W			
1-216-037-00	s RES, CHIP	330 5% 1/10W			
1-216-039-00	s RES, CHIP	390 5% 1/10W			
1-216-041-00	s RES, CHIP	470 5% 1/10W			
1-216-043-00	s RES, CHIP	560 5% 1/10W			
1-216-045-00	s RES, CHIP	680 5% 1/10W			
1-216-047-00	s RES, CHIP	820 5% 1/10W			
1-216-049-00	s RES, CHIP	1k 5% 1/10W			
1-216-051-00	s RES, CHIP	1.2k 5% 1/10W			
1-216-053-00	s RES, CHIP	1.5k 5% 1/10W			
1-216-055-00	s RES, CHIP	1.8k 5% 1/10W			
1-216-057-00	s RES, CHIP	2.2k 5% 1/10W			
1-216-059-00	s RES, CHIP	2.7k 5% 1/10W			
1-216-061-00	s RES, CHIP	3.3k 5% 1/10W			
1-216-063-00	s RES, CHIP	3.9k 5% 1/10W			
1-216-065-00	s RES, CHIP	4.7k 5% 1/10W			
1-216-067-00	s RES, CHIP	5.6k 5% 1/10W			
1-216-069-00	s RES, CHIP	6.8k 5% 1/10W			
1-216-071-00	s RES, CHIP	8.2k 5% 1/10W			
1-216-073-00	s RES, CHIP	10k 5% 1/10W			
1-216-075-00	s RES, CHIP	12k 5% 1/10W			
1-216-077-00	s RES, CHIP	15k 5% 1/10W			
1-216-079-00	s RES, CHIP	18k 5% 1/10W			
1-216-081-00	s RES, CHIP	22k 5% 1/10W			

Ref. No. Part No. SP Description

MAIN BOARD

1-589-128-11 o MOUNTED CIRCUIT BOARD
"MAIN"

9-994-794-01 s CRT

C20	9-994-781-01 s TANTALUM 47 16V
C21	1-163-038-11 s CHIP CERAMIC 0.1 25V
C22	1-163-038-11 s CHIP CERAMIC 0.1 25V
C23	1-126-157-11 s ELECT 10 20% 16V
C24	1-124-464-11 s ELECT 0.22 20% 50V
C26	9-994-780-01 s P-P CONDENCER 0.0047
C28	1-124-438-11 s ELECT 1 20% 50V
C29	1-124-584-11 s ELECT 100 20% 10V
C30	1-131-347-00 s TANTALUM 1 10% 35V
C31	1-126-157-11 s ELECT 10 20% 16V
C32	1-163-133-11 s CHIP CERAMIC 470PF 5% 50V
C33	1-126-157-11 s ELECT 10 20% 16V
C34	1-126-162-11 s ELECT 3.3 20% 50V
C35	1-163-088-11 s CHIP CERAMIC 0.1 25V
C36	1-124-455-00 s ELECT 100 20% 16V
C37	9-994-777-01 s ELECT 220 6.3V
C38	1-130-481-11 s CAP,PE TEREPHTHALATE 0.0068 5% 50V
C40	1-163-088-11 s CHIP CERAMIC 0.1 25V
C43	1-163-088-11 s CHIP CERAMIC 0.1 25V
C44	9-994-782-01 s TANTALUM 47 16V
C46	1-126-162-11 s ELECT 3.3 20% 50V
C48	9-994-783-01 s 0.0056 100V
C49	9-994-778-01 s ELECT 22 63V
C50	9-994-784-01 s 0.0015 1K
C51	1-163-088-11 s CHIP CERAMIC 0.1 25V
C52	9-994-779-01 s ELECT 56 16V
C53	1-163-088-11 s CHIP CERAMIC 0.1 25V
C54	1-163-088-11 s CHIP CERAMIC 0.1 25V
C55	1-163-088-11 s CHIP CERAMIC 0.1 25V
CN4	9-994-791-01 o RECEPTACLE, 7P
CN7	9-994-792-01 o RECEPTACLE, 3P
CN8	9-994-793-01 o RECEPTACLE, 2P

D2	8-719-914-42 s DA204K
D4	8-719-911-19 s ISS119
D5	9-994-773-01 s ERA15-06
D6	9-994-774-01 s ISS136
D7	8-719-948-45 s ERA22-08

Ref. No. Part No. SP Description

HLC 1-459-823-11 s COIL,HORIZONTAL LINEARITY

AIC2 8-759-300-28 s HA11423MP: HITACHI

IC3 8-759-100-94 s μPC358G2:

Q10 8-729-881-23 s 2SC2812-L7

Q11 8-729-881-23 s 2SC2812-L7

Q12 8-729-100-76 s 2SA812

Q20 8-729-881-23 s 2SC2812-L7

Q21 9-994-771-01 s 2SD1220

Q22 8-729-119-00 s 2SK612

Q23 8-729-162-43 s 2SB624-BV3

R43 1-216-109-11 s CHIP 330K 5% 1/10W

R44 1-216-083-11 s CHIP 27K 5% 1/10W

R60 1-216-057-11 s CHIP 2.2K 5% 1/10W

R61 1-216-057-11 s CHIP 2.2K 5% 1/10W

R66 9-994-785-01 s 10M

R67 9-994-786-01 s 91K

R69 1-216-081-11 s CHIP 22K 5% 1/10W

R70 1-216-079-11 s CHIP 18K 5% 1/10W

R72 1-216-081-11 s CHIP 22K 5% 1/10W

R73 1-216-081-11 s CHIP 22K 5% 1/10W

RV10 9-994-787-01 s 5K

RV11 9-994-788-01 s 5K

RV12 9-994-789-01 s 200

RV13 9-994-790-01 s 500

RV20 1-228-459-11 s METAL 10K

RV21 1-228-458-11 s METAL 5K

T1 1-439-419-11 s FBT

Ref. No. Part No. SP Description

SW BOARD

1-589-129-11 o MOUNTED CIRCUIT BOARD "SW"
(J,UC)
1-589-129-21 o MOUNTED CIRCUIT BOARD "SW"
(EK)

C1 1-124-438-11 s ELECT 1 20% 50V
C3 1-124-584-11 s ELECT 100 20% 10V
C4 1-124-584-11 s ELECT 100 20% 10V
C5 1-126-154-11 s ELECT 47 20% 6.3V
C6 1-124-438-11 s ELECT 1 20% 50V

C7 1-124-462-11 s ELECT 10 20% 16V
C8 1-163-113-11 s CHIP CERAMIC 68PF 5% 50V
C9 1-163-105-11 s CHIP CERAMIC 33PF 5% 50V
C10 1-163-015-11 s CHIP CERAMIC 0.0033 10%
C11 1-163-038-11 s CHIP CERAMIC 0.1 25V

CN1 9-994-803-01 o 8P
CN2 9-994-804-01 o 3P
CN3 9-994-805-01 o 5P
CN4 9-994-806-01 o 7S
CN5 9-994-807-01 o 2P

CP 9-994-808-01 s PROTECTORS ICP-N10(EK)

D1 8-719-914-43 s DAN202K

A IC1 8-759-630-27 s M5236ML: MITSUBISHI

L1 9-994-800-01 s 100μH
L2 9-994-801-01 s 47μH

LED1 9-994-802-01 s SLH-56VT

Q2 8-729-881-23 s 2SC2812-L7
Q3 8-729-881-23 s 2SC2812-L7
Q4 8-729-881-23 s 2SC2812-L7
Q5 1-806-828-11 s 2SC2814
Q6 9-994-796-01 s 2SC3722K
Q7 9-994-796-01 s 2SC3722K
Q8 8-729-881-23 s 2SC2812-L7

Ref. No. Part No. SP Description

R2 9-994-799-01 s CHIP 24K 5% 1/10W
R3 1-216-064-11 s CHIP 4.3K 5% 1/10W

RV1 1-228-473-11 s METAL 5K
RV2 1-230-075-11 s CARBON 2K "CONTR"
RV3 1-228-475-11 s METAL 20K
RV4 1-226-368-11 s CARBON 10K "BRIGHT"

S1 1-570-845-11 s SLIDE "PEAKING ON/OFF"
S2 1-570-845-11 s SLIDE "TALLY ON/OFF"

LED BOARD

1-589-127-11 o MAUNTED CIRCUIT BOARD
"LED"

9-994-810-01 o LED PWB

CN9 9-994-809-01 o RECEPTACLE, 5P

LED2 8-719-800-25 s TLR109A
LED3 8-719-800-25 s TLR109A
LED4 8-719-800-25 s TLR109A
LED5 8-719-800-19 s TL0102A

FRAME

Q1 8-729-315-63 s 2SB856

D-5. PACKING MATERIAL AND ACCESSORIES

3-699-152-01 o CUSHION, UPPER
3-699-153-01 o CUSHION, LOWER
3-699-163-01 o CARTON, INDIVIDUAL(UC)
3-699-165-01 o CARTON, INDIVIDUAL(EK)